

126 VARIATIONS ON TWINKLE TWINKLE LITTLE STAR

Kabalevsky "Pieces for Children" with second piano composed by Julian Yu

Julian Yu | composer Michael Kieran Harvey | piano

126 VARIATIONS ON TWINKLE TWINKLE LITTLE STAR composed by Julian Yu

CD ONE

- 1 37 Counterpoint | Harmony | Texture and Figuration
- 38–47 Some tricks
- 48–77 Classical composers
- 78–86 Tonality and Atonality
- 87–92 Twelve-Tone and Serialism

CDTWO

- 1 20 Boundless possibilities
- 21–25 Popular music
- 26–34 Folk music

DMITRI KABALEVSKY

PIECES FOR CHILDREN

for two pianos second piano composed by Julian Yu

CD TWO

- 35_58 Opus 39
- 59-61 Opus 89
- 62-72 Opus 27

Michael Kieran Harvey | piano



P 2015 Move Records

move.com.au

The Young Person's Guide to Composition: 126 varations on *Twinkle, Twinkle Little Star*

In 2010 Zen-On Music in Japan published my piano album of the above title containing over 100 variations on *Twinkle, Twinkle Little Star*. The aim of these was to show many different composition techniques, while also being great fun to play. The album proved very popular and was quickly published in China as well.

In this CD, pianist legend Michael Kieran Harvey plays the complete album brilliantly. Michael is well-known as a champion of Australian contemporary composition, so it may come as a surprise to hear him playing such tuneful, simple music – until he gets to the later pieces, some of which are quite modern and challenging.

Where did my idea come from to write so many variations? It came from a joke that I heard once about a leader who, after giving a speech, led the crowd in singing a song – except that, in his nervousness, he sang the right words and rhythm to the wrong melody, causing general hilarity. This mishap, interchanging the words and melody of two different songs, gave me to realise that in composition one could interchange the rhythm and melody, or melody and harmony, texture and so on, of two or more different pieces.

When teaching composition, I often demonstrate different ways of varying a given theme. Students frequently ask me questions such as, "How many harmonic and contrapuntal treatments of this theme are possible?"; "How might a Romantic composer have treated this theme?"; or "How can I

create an atonal piece of music out of a tonal theme?" Although the themes they ask about are all different, I thought that it might be helpful to use just one theme to illustrate many different compositional techniques and styles and show the myriad ways in which one can modify a theme, that is, to show how unity can beget diversity.

The collection is deliberately popular in its approach, and aims to be humorous and interesting, in order to convey the feeling that 'classical music' need not be serious, high-brow or unreachable. The variations present a wide range of familiar musical styles, highlighting the differences between them.

Many of the variations are deliberately reminiscent of well-known works, created by taking the work in question as a base and substituting, merging, piecing together or superimposing the notes of *Twinkle*, *Twinkle Little Star*. Some famous pieces that are difficult to play in their original form have been simplified during the process of imitation, in order to make these variations accessible to pianists with a medium level of proficiency.

The collection is intended mainly as an introduction to classical music styles, but at the end there are also some variations based on popular and folk music genres from different countries.

For the casual listener these pieces will provide hours of fun and entertainment, while the more serious listener may learn much about the process of composition by studying them in conjunction with the piano album.

CD ONE

TRACK AND VARIATION NUMBERS

1 Twinkle Twinkle Little Star (referred to hereafter as TTLS) theme2 TTLS complete theme

Counterpoint

- 3 First species
- 4 Second species
- **5** Third species
- **6** Fourth species
- **7** Fifth species
- 8 TTLS Canon
- 9 TTLS Invertible
- **10** *TTLS* Non-imitative counterpoint
- **11** *TTLS* Invertible non-imitative counterpoint

Signature Motifs

- **12** Signature motifs 2 voices
- 13 Signature motifs 3 voices

J. S. Bach's famous theme with the cantus firmus

- 14 TTLS with the cantus firmus
- **15** TTLS Invention
- **16** Kleine Fuge

Harmony

17 *TTLS* harmonised with primary triads **18** *TTLS* harmonised with primary triads, altered melody

- **19** *TTLS* Non-harmonic tones
- **20** TTLS Harmonic sequence
- **21** TTLS Secondary dominants
- **22** TTLS Suspension
- 23 TTLS Chromatic passing (1)
- 24 TTLS Chromatic passing (2)
- 25 TTLS Harmonic progression
- **26** TTLS Quartal chords
- **27** TTLS Pentatonic scale

Texture and Figuration

- 28 TTLS Alberti bass
- **29** TTLS Allegro appassionato (Ballade in G minor Op. 23 by Chopin)
- **30** TTLS Allegro delicato
- **31** *TTLS Tempo di gavotta* (*Gavotte* by F. J. Gossec)
- **32** TTLS Andante affettuoso alla Liszt (Three Concert Études No. 3)
- 33 TTLS Moderato grazioso a Mendelssohn (Song of Spring from Song Without Words Op. 62 No. 6)
- **34** TTLS A la polonaise (Chopin's Polonaise in A Major Op. 40 No. 1)
- 35 TTLS Tempo di valse
- (J. Strauss' Tales from the Vienna Woods)
- 36 TTLS Moderato e con grandezza
- **37** TTLS Song Without Voice music for the left hand alone

Some Tricks

- **38** TTLS Melodic development
- **39** TTLS Palindrome
- **40** TTLS Scherzino
- **41** TTLS Black and White

- **42** *TTLS Golden Star Dance* (Chinese folk tune *Wild Dance of the Golden Snake*)
- 43 TTLS Crab Canon
- 44 TTLS Crab Canon full
- 45 TTLS Quodlibet (Mozart,

Mendelssohn, folk and children's songs)

- **46** TTLS Dovetailing (Frère Jacques)
- **47** *Is Jacques still Asleep?*

Composers and Genres

- **48** Bach *Prelude*: (*Prelude* in C minor, from *The Well-Tempered Clavier, Book I*)
- 49 Giulio Caccini Ave Maria
- **50** Pachelbel Canon
- 51 Vivaldi Spring
- 52 Schubert "Impromoments Musical"
- 53 Hanon "Canon on Hanon"
- **54** Mozart "Rondo alla Twinka" (Rondo alla Turca)
- 55 Shostakovich Piano Concerto No. 1
- 56 Bartók In Bagpipers style
- 57 Beethoven "Für Estelle" ("Für Elise")
- **58** Strauss Radetzky March
- **59** Bizet *Habanera* from *Carmen*
- **60** Ravel *Bolero*
- 61 Saint-Saëns Danse Macabre
- 62 Grieg "Edvard's Dance"
- **63** Chopin *Étude*
- 64 Khachaturian Toccata
- 65 Dvořák "Little Star over the New World"
- **66** Tchaikovsky "Rondo" (The Nutcracker)
- **67** Rimsky-Korsakov *Sheherazade*
- **68** Mussorgsky "Preview of Pictures at an Exhibition"
- 69 Brahms Symphony No. 1

- **70** Schumann *Carnaval* and *Piano Concerto in A minor*
- **71** Liszt "Little Star Rhapsody"
- 72 Debussy "Faun in Moonlit Snow"
- 73 Gershwin "Rap in Light Blue"
- (Rhapsody in Blue)
- 74 Puccini Nessun Dorma(Turandot)
- 75 Rachmaninov Prelude in G minor
- **76** Prokofiev "Three Oranges" (The Love for Three Oranges)
- 77 Copland "Rodeo Rhythm" (Rodeo)

Tonality and Atonality

- **78** Canon using bitonality (minor 9th)
- 79 Canon using bitonality (major 7th)
- **80** Canon using bitonality (major 6th)
- **81** *TTLS* with contrasting melody in a different key
- **82** *TTLS* with contrasting melody and harmony in different keys
- **83** *TTLS* harmonised with increased dissonance
- 84 TTLS A free atonal harmonisation
- 85 TTLS Two strands of parallel triads
- **86** *TTLS* Two strands of parallel triads (mirror image)

Twelve-Tone and Serialism

- **87** *TTLS* The twelve-tone series
- **88** Sad Story
- 89 Twinkle Twinkle is not "in tune"
- **90** Schoenberg In *Gavotte* style (*Suite für Klavier*, Op. 25)
- 91 Webern "Pointillism" (Variationen, Op. 27)

92 Berg *Sonate* (*Piano Sonata* Op. 1)

CD TWO

TRACK AND [VARIATION NUMBERS]

Boundless Possibilities

- 1 [93] TTLS Modes of limited transposition
- **2** [94] Messiaen "Étoiles Exotiques" (Oiseaux Exotiques)
- 3 [95] Joji Yuasa Cosmos Haptic
- **4** [96] Takemitsu "Uninterrupted Song of Love" (Pause Ininterrompue)
- **5** [97] Ligeti "Con Spirito" (Musica Ricercata)
- 6 [98] Stravinsky "The Soldier's

March" (The Soldier's Tale)

- **7** [99] Witold Lutoslawski *Taniec* (*Little Suite for Symphony Orchestra*)
- 8 [100] Kabalevsky Clowns Op. 30 No. 20
- 9 [101 TTLS Minimalism Minitude
- 10 [102] TTLS Notation Phantasy
- **11** [103] Using Numbers to Find a New Rhythm
- **12** [104] *TTLS* new rhythm
- 13 [105] TTLS Reinvention
- **14** [106] *TTLS* Tone Cluster and Graphic Notation
- **15** [107] *Sudden Incident* (Music Notation)
- **16** [108] *Astralita My Little Star* (in the style of Julian Yu)
- **17** [109] *TTLS Bagatelle*
- **18** [110] *Pentatude* (study based on the number 5)
- **19** [111] *Autumn Evening* (haiku one note)
- 20 [112] Ancient Pool (haiku two notes)

Popular Music

- **21** [113] *TTLS* Disco
- **22** [114] *TTLS* Ragtime (Scott Joplin's *Maple Leaf Rag*)
- 23 [115] TTLS Boogie
- **24** [116] *TTLS* Jazz
- **25** [117] *TTLS* Blues

Folk Music

- 26 [118] "Star-kura" (folk tune Sakura)
- 27 [119] "The Stars are High" (Chinese style)
- 28 [120] Chinese folk ornamentation
- 29 [121] Heterophony in Chinese Music
- 30 [122] Beat in Peking Opera
- **31** [123] "stAr-irang" (Korean folksong Arirang)
- **32** [124] "The Starlark" (Romanian folk tune Ciocirlia [The Skylark])
- **33** [125] *Philogamelania* (Indonesian gamelan music)
- 34 [126] Finale Passacaglia

*

Kabalevsky "Pieces for Children" for two pianos (second piano composed by Julian Yu)

Although Dmitri Kabalevsky lived in the twentieth century, his musical language is simple, direct and traditional, and his most well-known piano works were written for children. His compositions mainly use popular, natural scales and, though highly intuitive, are very cleverly structured. When playing some of his pieces, I discovered that you can take the main melody, move it back

one or more beats, and add it to the original piece to create a very successful "canon" - for example, Autumn Song (opus 39 no. 9) and Dramatic Fragment (opus 27 no. 30). Some of Kabalevsky's melodies lend themselves to creating an inverted canon, for example in Dance (opus 19 no. 9) and Ditty (opus 27 no. 2). If you are careful enough, you can find many interesting ways of adding to his pieces, not by chance but derived from the well-structured music itself.

In each of these pieces for two pianos I have left the original Kabalevsky piece intact, and merely added a second piano part to be played along with the original.

I am very grateful to Dmitri Kabalevsky's daughter, Maria Kabalevskaya, for her enthusiasm and support for these arrangements, which were made with the permission of Kabalevsky's publisher. The music is available on request. I hope that these pieces will be enjoyed by both listeners and pianists alike.

- 35 Little Song, Op. 39: No. 1
- **36** Short Polka, Op. 39: No. 2
- 37 Marching Tune, Op. 39: No. 3
- 38 Lullaby, Op. 39: No. 4
- **39** Play , Op. 39: No. 5
- 40 Short Scherzo, Op. 39: No. 6
- 41 A Funny Event, Op. 39: No. 7
- **42** Melody , Op. 39: No. 8
- **43** Dance, Op. 39: No. 9
- 44 March, Op. 39: No. 10
- 45 Autumn Song, Op. 39: No. 11
- **46** Joke, Op. 39: No. 12
- 47 Waltz, Op. 39: No. 13
- 48 Little Fairy Tale, Op. 39: No. 14
- 49 Race, Op. 39: No. 15

50 Sad Story (1), Op. 39: No. 16

51 Folk Dance, Op. 39: No. 17

52 Gallop, Op. 39: No. 18

53 Prelude, Op. 39: No. 19

54 Clowns, Op. 39: No. 20

55 Improvisations, Op. 39: No. 21

56 Novellete, Op. 39: No. 22

57 Slow Waltz, Op. 39: No. 23

58 Happy Journey, Op. 39: No. 24

59 Cross-Patch, Op. 89: No. 12

60 A Little Hedgehog, Op. 89: No. 8

61 My Little Stubborn Brother, Op. 89: No. 27

62 Dance, Op. 27: No. 27

63 A Little Prank, Op. 27: No. 13

64 Sad Story (2), Op. 27: No. 6

65 Dramatic Fragment, Op. 27: No. 30

66 Ditty, Op. 27: No. 2

67 Meadow Dance, Op. 27: No. 17

68 Fairy Tale, Op. 27: No. 20

69 Song of the Cavalry, Op. 27: No. 29

70 Playing Ball, Op. 27: No. 5

71 Waltz Time, Op. 27: No. 1

72 Etude, Op. 27: No. 26

The Young Person's Guide to Composition: Variations on the theme of Twinkle Twinkle Little Star for piano by Julian Yu. Zen-On Music Company Ltd, Japan. (ISBN 978-4-11-168424-3)

Piano II on Kabalevsky's Pieces for Children

by Julian Yu. astralita music, Australia. (ISMN 979-0-720-139-00-5). Email: yujjj@hotmail.com

Program notes: Julian Yu

Front cover: Benjamin Thomas Photograph: Pia Johnson



Star and cat drawings: Julian Yu

Recorded at Move Records studio from March

to October 2012

Engineer: Vaughan McAlley Editing: Vaughan McAlley Mastering: Martin Wright

P 2015 Move Records

move.com.au



ALSO AVAILABLE FROM MOVE AND ITUNES: 70 more variations on Twinkle Twinkle Little Star

TTLS has fascinated and irritated composers through the ages. In this second collection Julian Yu has commissioned a staggeringly diverse cornucopia of stylistic arrangements of the tune. Michael Kieran Harvey tackles scores from the frivolous to the frenetic, the fragile to the fragrant, the popular to the profound. Every composer has responded with good humour and imagination.



Julian Yu – The Young Person's Guide to Composition

Variations on the theme of 'Twinkle, Twinkle Little Star'

How many variations can you make from a relatively simple piece? Well over one hundred if your purpose is to succinctly demonstrate a specific technique or style of composition as presented here in Julian Yu's The Young Person's Guide to Composition.

This is done by the applying a range of composition techniques to modify a simple theme. Yu chose a world recognised piece, *Twinkle Twinkle Little Star (TTLS)* as his seed.

Over one hundred variations are presented. They were created through imitating a general musical style or substituting, merging, piecing together or superimposing pre-exisiting works with the notes of *TTLS*. The variations reminiscent of well-known works are almost familiar to the reader/listener.

In spite of the title, the purpose of this work is to introduce a variety of composition skills to people 'new to composition'. The pieces range from the succinct to multifaceted works encompassing a plethora of the techniques examined as illustrated in the final variation, 126 – Finale – Passacaglia.

Example 1 – This is the well-known tune *Ah! Vous Dirai-Je, Maman,* which Mozart used in his famous piano variations and which is usually known today as *Twinkle Twinkle Little Star* (referred to hereafter as *TTLS*). In this album, the tune is used as the theme for many different variations, each illustrating a different topic.

Example 2 – The complete tune *TTLS*, including the second half of the melody.

Counterpoint

Principals outlined by Johann Fux (1660-1741) in *Gradus ad Parnassum* regarding the art of counterpoint have been used in Western music composition since the 15th century and are still important today. The main theme, in fixed note values, is called the *cantus firmus* ('fixed melody') and against it can be written five different kinds of counterpoint known as species. Variations 3 to 7 demonstrate Fux's five species counterpoint using a simplified form of *TTLS* as *cantus firmus*.

Variation (V) 3 – First species: note against note. Only consonant intervals (thirds, sixths, octave and unison) are permitted.

V 4 – Second species: two notes against one. The first note must be consonant; the second may be consonant or dissonant. If dissonant, it must be approached and quitted by step (a second interval).

V 5 – Third species: four notes against one. The first note must be consonant, while one of the other three notes may be dissonant if by step. This rule is relaxed in the case of idioms such as the *double neighbour* figure (marked).

V 6 – Fourth species: two notes to one with the note of the weak beat (which must be consonant) tied to the next weak beat (forming a *suspension*). Occasional breaks in the chain of suspensions are allowed.

V 7 – Fifth species: a combination of species 1 to 4, plus occasional use of shorted note values. Also known as florid counterpoint.

V 8 – There are two basic types of contrapuntal procedure: imitative and non-imitative. Variations 3 through 7 are all non-imitative counterpoint, using contrasting melodic shapes. In Variation 8, the second voice enters after the first and imitates it exactly in melody and rhythm, forming a canon. (Note: Variations 8 thru 11 are not based on the cantus firmus.)

V 9 – Some canons are *invertible*. This means that the relative registers of the voices can be interchanged. This inverts all the intervals: sixths becomes thirds, thrids become sixths, while octaves and unisons are unchanged.

The interval of a fifth musc be avoided in an invertible canon as inverting it would produce a fourth, which is considered dissonant.

V 10 – Non-imitative counterpoint can also be invertible. Here TTLS is combined with a contrasting part in the left hand.

V 11 – The previous variation inverted.

Signature Motifs

Counterpoint enables independent and characteristically different material to be combined into a new artistic entity. Variation 12 combines the cantus firmus with a contrasting melodic line featuring the signature motifs of several composers. Signature motifs are musical notes used by some composers to represent their initials or other letters in their names. These letters can be represented by the notes a, b, c, d, e, f, g, h, and s. B may be represented by either B or by B flat, which is called B in German. H is represented by B, called H in German. S is represented by E flat, called Es in German. Signature motifs give us a unique way of creating new motifs or themes.

V 12 – *Cantus firmus* with signature motifs for SCHönBErG, BÉla BArtók, D. SCHostakovich, and BACH are used sequentially in this variation (the capitalised letters in the names signifying use of a representative note).

V 13 – An example of three-part counterpoint using signature motifs.

J. S. Bach's famous theme with the *cantus* firmus

V 14 – Johann Sebastian Bach (German composer, 1685-1750) was a great master of contrapuntal writing. Variation 14 pays him homage by using several of this themes in combination with our *TTLS cantus firmus* (*C.F.*). Note that this *C.F.* is represented in the manner of a *passacaglia*, a form also used by J. S. Bach.

V 15 – J. S. Bach wrote a book of teaching pieces which he called *Inventiones*, two-and three-part contrapuntal pieces for the keyboard. Variation 15 is a short invention using the techniques discussed earlier. Notice that the canon on *TTLS* has been inverted in the middle of the piece.

V 16 – The *fugue* is a contrapuntal composition in two or more voices. In the exposition, one voice introduces a theme (the subject), which the other voices them imitate one by one. In the development, the theme is frequently restated in different voices as if in a dialogue each time varied and in a different key. This leads to a recapitulation in which it reappears in its original form. V 16 is a small fugue in three voices.

Harmony

V 17 – TTLS is harmonised using only primary triads (the I, IV and V chords) except for the penultimate chord (a dominant 7th chord). (Note: Variations 17 – 27 generally use piano

style for easy playing rather than textbook four-part vocal style).

V 18 – Melody is an important element in music. The same chord progression can accommodate many different melodies. In V 18, the harmony from V 17 accompanies the melody, slightly altered, of the Piano Study No. 19 from Op. 599 of Carl Czerny (Austraian composer, 1791-1857).

V 19 – This shows the harmonisation of V 17 ornamented with auxiliary notes, passing notes and suspensions in a free style.

V 20 – An example of a harmonic sequence.

V 21 – A modification of V 20 that introduces secondary dominants and diminished seventh chords into the sequence, which can be heard as transient modulations.

V 22 – A modification of V 21, including some progressions not used in classic harmony (bars 5-6). They are introduced here to demonstrate the possibilities.

V 23 – An elaboration of V 22 with added chromatic passing and auxiliary notes in the tenor and bass parts, leaving the harmony unchanged.

V 24 – More chromatic passing and auxiliary notes are added in the alto part.

V 25 – At this point, the limits of traditional harmony have been reached. However, an expanded tonality offers further ways

of harmonising this theme. V 25 is a harmonisation based on a descending chromatic line in the bass.

V 26 – Here quartal chords (chords built on 4ths) have been used. The bass moves mainly in contrary motion against the top three parts.

V 27 – Other modes besides major and minor can be used. The harmony in V 27 is derived from a pentatonic scale, with the voices treated contrapuntally. The voice leading is just as important as the vertical sound.

Texture and Figuration

V 28 – The *Alberti bass*, named after the Italian singer and composer Domenico Alberti (Italian, 1710-1740), was the most frequently used type of harmonic figuration in the keyboard writing of the 18th and 19th centuries. This variation is an example.

V 29 – There is great scope for variety of texture while keeping melody and harmony basically unchanged, as the next few examples illustrate. V 29, with its generally lower register and wider range, rhythmic changes and non-harmonic tones, is only one of a great many possibilities. This variation uses elements of *Ballade* in G minor Op. 23 by Chopin.

V 30 – Descending broken chords are used in a triplet rhythm, with a few non-harmonic tones added to improve the flow.

V 31-35 – Texture and figuration often reflect the composer's style and the musical genre. In these variations, V 31 is marked as 'Tempo di gavotta' and uses elements of *Gavotte* by F. J, Gossec; V 32 Andante affettusoso alla Liszt uses elements of *Three Concert Études No.* 3 by Liszt; V 33 Moderato grazioso a Mendelssohn uses elements of *Song of Spring* from *Song Without Words Op. 62 No.* 6 by Mendelssohn; V 34 A la polonaise uses elements of Chopin's *Polonaise* in A Major Op. 40 No. 1; V 35 Tempo di valse uses elements of J. Strauss' *Tales from the Vienna Woods*.

V 36 – Every layer of the texture in V 36 has been reinforced with an octave for grand effect.

V 37 –Song Without Voice – music for the left hand alone: Many composers write piano music for the left hand alone; among them the great masters Czerny, Brahms, Liszt, Bartók, Ravel and Scriabin. It is intended not just for pianists who cannot use their right hand, but also as a genre in its own right.

Some Tricks

V 38 – Shows a variety of ways to develop a melody including some demonstrated earlier. In order, the techniques used are: Theme (four bars), Retrograde (four bars), Inversion (four bars), Retrograde inversion (four bars), Transposition (four bars), Augmentation (eleven bars), Diminution (four bars), Ornamentation (four bars), Fragmentation (eight bars), Repetition (eight bars),

Repetition and Fragmentation (seven bars), Extension (eight bars), Interval Contraction (four bars), Interval Expansion (four bars), Pitch Displacement (four bars), Register displacement (four bars), Interpolation (eight bars), Permutaion (four bars), and Rhythmic Alteration (four bars).

V 39 – *Palindrome*: Uses some of the methods illustrated in the previous variation. Here, retrograde, inversion and interpolation are used. The title refers to the music being the same whether read forwards or backwards.

V 40 – *Scherzino*: Uses ornamentation and register displacement.

V 41 – *Black and White*: Each hand uses only black or white keys.

V 42 – *Golden Star Dance*: Uses the techniques of repetition and fragmentation. Original work referenced is the Chinese folk tune *Wild Dance of the Golden Snake*.

V 43-44 – *Crab Canon*: This is a uniquely structured piece in two voices. The second voice, read in bass clef, is a retrograde inversion of the first and is played simultaneously with the first. (To read the second voice, the performer turns the score upside down.) The term *crab canon* refers to the notion that crabs walk backwards, seen also in the Latin term for a retrograde canon, *canon cancrizans* (from *cancer* = crab). Variation 44 is a reprint of V 43 using conventional notation.

V 45 – Quodlibet: Latin for 'whatever you like', a quodlibet is a composition in which two or more well-known tunes are juxtaposed horizontally or vertically. If horizontal juxtaposition is used, care should be taken with the choice of final notes, the length of phrases and so on; if the tunes are combined vertically, the rules of counterpoint apply. The first twelve bars of V 45 are an example of horizontal juxtaposition. After that, TTLS is combined vertically (played simultaneously) with Old McDonald Had a Farm, then Sur Le Pont D'Avignon, and finally This Old Man.

V 46 – *Dovetailing*: Interpolation, used previously in V 38, is used to combine two familiar tunes: TTLS and the French nursery song *Frère Jacques*. It takes one note from *TTLS*, then one from *Frère Jacques*, then another from *TTLS*, and so on. The resulting melody is arranged with a suitable rhythmic pattern.

V 47 – *Is Jacques still Asleep?*: Following on from the previous variation, *Frère Jacques* is followed by *TTLS* here, after which a new melody is derived from combining the two tunes.

Composers and Genre

Four methods have been used to set this group of variations on TTLS in to the styles of some famous composers.

substituting the melody and harmony of TTLS for the original melody and harmony, while leaving the composer's original rhythm and texture unchanged;

merging the melody of TTLS into the harmony, rhythm and texture of the composer's original music; piecing together fragments from different works by the composer to reconstruct TTLS, following its contours; and superimposing TTLS onto the composer's original work, which remains intact.

V 48 – Bach *Prelude*: References *Prelude* in C minor, from *The Well-Tempered Clavier, Book I*.

V 49 – Caccini *Ave Maria*: The *TTLS* melody merges in to the chords and contours of the eight-bar harmonic sequence that Giulio Caccini used in his song *Ave Maria*.

V 50 – Pachelbel *Canon*: Created out of Pachelbel's *Canon*. Melodic fragments are pieced together to reconstruct *TTLS* on the same ground bass.

V 51 – Vivaldi *Spring*: The **substitution** method is applied to *Spring* from Vivaldi's set of four violin concerto's *The Four Seasons* and used to restate *TTLS*.

V 52 – Schubert "Impromoments Musical": Follows the contours of TTLS. It is an adaption of material from Franz Schubert's Impromptus Momens Musicals for piano.

V 53 – Hanon "Canon on Hanon": The collection of elementary keyboard exercises The Virtuoso Pianist by French piano teacher Charles-Louis Hanon, are based on sequential repetition. Variation 53 applies the pattern from the first of these exercises to each note

of *TTLS* (which becomes the first note of each bar). A canon is formed when the left hand enters one bar later.

V 54 – Mozart "Rondo alla Twinka": This uses the texture and rhythm of Mozart's wellknown piano piece Rondo all Turca, but TTLS substitutes for the original melody and harmony.

V 55 – Shostakovich *Piano Concerto*: Again, the rhythm and texture of a passage from a popular work, in this case Shostakovich's *Piano Concerto No. 1*, is combined with TTLS using the substitution method to create this variation.

V 56 – Bartók *In* Bagpipers *style*: Derived from Béla Bartók's *Sonatina*: *Bagpipers*. Drone and bagpipe-like melodic embellishments of the original work are preserved in the sustained bass and characteristically decorated *TTLS* melody.

V 57 – Beethoven "Für Estelle": TTLS is substituted for the melody in one of his most popular piano pieces, Für Elise, while retaining the original rhythm and texture.

V 58 – Strauss *Radetzky March*: This variation preserves the original phrasing, modulation and texture from Johann Strauss senior's *Radetzky March* while substituting *TTLS* for the original melody.

V 59 – Bizet *Habanera* from *Carmen*: The familiar rhythmic pattern from the opera *Carmen* by Georges Bizet begins Variation

59, but rather than the French composer's melody following, we hear *TTLS*.

V 60 – Ravel *Bolero*: Another distinctive rhythm, the triple time bolero, is played by the left hand in this variation. It is also used, of course, in Ravel's *Bolero*, which is combined with *TTLS* here.

V 61 – Saint-Saëns *Danse Macabre*: The theme from *Danse Macabre* appears five times. It is accompanied by *TTLS* each time, mostly using superimposition except for the third occurrence where the substitution method is used.

V 62 – Grieg "Edvard's Dance": Excerpts from five piano pieces by Norwegian composer Edvard Grieg are incorporated into Variation 62. TTLS sometimes substitutes for the original melody by fitting into Grieg's rhythms; other times it is superimposed.

V 63 – Chopin Étude: An étude or study is a composition specifically written to provide practice in a particualr technique. The melody of a simplified Chopin Étude has been hijacked by TTLS.

V 64 – Khachaturian *In his* Toccata *style*: *Toccata* is an Italian word meaning to touch. Following various stages of development, a *toccata* is now a highly technical piece for keyboard featuring the quick alternation of both hands.

V 65 – Dvořák "Little Star over the New World": The slow, lyrical melody from the second movement of the Czech composer's New World Symphony is quoted in its entirety. Unlike previous variations which featured imitation of a personal style, new material is added to this pre-existing work forging a 'new piece'.

V 66 – Tchaikovsky "Rondo": The opening rhythm of this Variation is derived from his ballet *The Nutcracker*. Two of the composer's other works are quoted at bars 13-16 and 21-28. Both of these have descending scale patterns just like the middle of *TTLS*.

V 67 – Rimsky-Korsakov *Sheherazade*: The Arabian folk tale inspired symphonic suite *Sheherazade* by Russian composer Nikolai Rimsky-Korsakov is quoted in three melodic fragments, the Eastern flavour combining well with *TTLS*.

V 68 – Mussorgsky "Preview of Pictures at an Exhibition": Over 240 arrangements exist of Pictures at an Exhibition, a master piano work by Modest Mussorgsky (Russian composer, 1839-1881) describing ten pictures vividly in music. This variation is a sample of what the result may have been if the composer's theme had been TTLS.

V 69 – Brahms *Symphony*: Based on a theme from the last movement of *Symphony No.*1 by Johannes Brahms (German composer, 1833-1897). The melody of TTLS has been merged into the harmonic progression of this majestic master.

V 70 – Schumann *Carnaval*: Fragments of Robert Schumann's (German composer, 1810-1856) piano suite *Carnaval* and *Piano Concerto in A minor* have been used in combination with the TTLs melody and harmony.

V 71 – Liszt "Little Star Rhapsody": Fransz Liszt (Hungarian composer, 1811-1886) wrote a set of variations based on the famous opening theme from the 24th Caprice in A minor for violin by Nicolo Paganini (Italian violinst and composer, 1782-1840). Here Liszt's version is used as a basis with the TTLS melody substituted. The initial theme is followed by a slow variation, after which the TTLS melody appears in the rhythm of a Hungarian folk dance. It is repeated ten times, lightly at first but progressively increasing in volume and energy. Notice the gradual changes in texture from one repetition to another.

V 72 – Debussy "Faun in Moonlit Snow": Claude Debussy (French composer, 1862-1918) represents the Impressionist school of composition. V 72 pieces together fragments from five of his piano works.

V 73 – Gershwin "Rap in Light Blue": George Gershwin (American composer, 1898-1937) successfully combined classical music with jazz. Here the melody of TTLS merges into the harmony of his unique Rhapsody in Blue.

V 74 – Puccini "Nessun Dorma": Giaccomo Puccini (Italian composer, 1858-1924) wrote many operas. This aria from his opera Turandot contains the lyrics, "Watch the stars that tremble with love and hope ...", so appropriately superimposed over this it is the *TTLS* melody.

V 75 – Rachmaninov *Prelude*: Sergei Rachmaninov (Russian composer, 1973-1943) wrote some truly challenging works for pianists. Here *TTLS* substitutes for the melody in his G minor prelude. At the climax, one extra bar has been added to bring out the theme.

V 76 – Prokofiev *In* Three Oranges *style*: This variation is based on the ballet and opera music of Sergei Prokofiev (Russian composer, 1891-1953) beginning with a theme from *The Love for Three Oranges*. One of the hallmarks of Prokofiev's music is his unique way of modulating (changing keys).

V 77 – Copland "Rodeo Rhythm": Aaron Copland (American composer, 1900-1997) based his ballet music Rodeo on folk music from America's west. The original melody is replaced here with TTLS with care given to preserve Copland's original style.

Tonality and Atonality

Tonality refers to the key of a piece of music which uses a scle as its basic material and accepts certain relationships between the notes of the scale. One note, the tonic or key centre, is most important. Bitonal music has two keys; polytonal music has two or more keys; and when the key centre is totally lost or absent, the music is called atonal. Many composers started to explore atonality

and polytonality in the early 20th century, as it seemed to them that conventional tonality was on the verge of collapse and should be abandoned. Composers new to this area may begin by writing music in two keys (bitonality). The next group of variations shows some of the myriad possibilities for bitonal harmony and counterpoint writing while keeping the melody of TTLS intact. Some of the variations border on atonality.

Three Canons using Bitonality

V 78 – 1. A canon at a distance of 6 beats and an interval of a minor 9th.

V 79 – 2. A canon at a distance of 4 beats and an interval of a major 7^{th} .

V 80 – 3. A canon at a distance of 1 beat and an interval of a major 6^{th} .

V 81 – The theme appears with a contrasting melody in a different key.

V 82 – Should be compared with V 19 which appeared in the context of classical harmony. This time the melody and harmony are in different keys.

The increasing use of dissonance during the late 19th century weakened the established tonal system and led to the rise of atonality. Many rules, strategies and systems were developed with no single theory able to explain all of them. The following variations provide a few possibilities for harmonic treatment of *TTLS*.

V 83 – The harmony is built around a sequence.

V 84 – A free atonal harmonisation of *TTLS*. Hints of traditional harmony are present.

V 85 – Two strands based on parallel triads. One strand remains static while the other moves up or down.

V 86 – Again two strands of parallel triads. This time the lower strand is an exact inversion (mirror image) of the upper strand.

7. Twelve-Tone and Serialism

The twelve-tone technique formulated by Arnold Schoenberg is a systematic way of writing atonal music. It is based on an ordered arrangement of the twelve notes of the chromatic scale, called a series or tone row, or the primary form (P). This may be inverted and/or reversed, resulting in forms known as inversion (I), retrograde (R), and retrograde inversion (RI) - see V 87. All of these may be transposed by any interval, giving forty-eight possible forms of the row. All pitch-based elements of music (melody, harmony and so on) are generated from the series. In order to avoid tonality, no note may be repeated until the whole series has been used, though in practice liberties are usually taken. Developing this idea, composers applied the series concept not only to pitch but also to rhythm, dynamics and so on, and the resultant method was called serialism.

V 87: The twelve-tone series used here follows the contours of *TTLS*. The treble line is the primary form; the bass line inverts the pitch intervals of the treble line. Halfway through, the treble line becomes the retrograde of the primary form and the bass line the retrograde inversion.

V 88 – *Sad Story*: The same twelve-tone series is used again in this variation.

V 89 – Twinkle Twinkle is not "in tune": The previous variation (88) do not bare much resemblance to TTLS because of the different rhythm. This variation, 89, uses the rhythm, making TTLS more apparent.

V 90 – Schoenberg *In Gavotte* style: Rhythm plays a very important part in atonal music. V90 will sound like Schoenberg due to the use of the composer's rhythm with the V 87 *TTLS* series of pitches.

V 91 – Webern "Pointillism": Anton Webern's twelve-tone music is generally succinct and compact. Short note values are separated by rests and large leaps in register, a style known as pointillism. In this variation, the original notes of TTLS are used to illustrate this style clearly. Webern's Variationen (II) provides the rhythmic and textural material for the piece and TTLS the pitches.

V 92 – Berg *In* Sonate *style*: Alban Berg combined the twelve-tone technique with the Late Romantic style in his music. Section I in V92 reconfigures a non-serial work, Berg's *Piano Sonata*, according to the *TTLS*

twelve-tone series. In section II, only the melody uses the twelve-tone series while the accompaniment is an imitation of Berg. Section III uses no 12-tone series at all, but the *TTLS* melody is combined with Berg's rhythm, harmony and texture.

Boundless Possibilities

Music composition has become less standardised and more diversified since the start of the twentieth century. There are many rational ways of choosing and arranging notes apart from Schoenberg's twelve-tone system. The *modes of limited transposition* developed by Olivier Messian is another example. A system of modes created from rows of tones and semitones was used in his compositions. V94 pays homage to this great composer. It is based on his third mode: *tone, semitone, semitone, semitone, semitone, semitone, semitone, semitone, semitone, semitone.*

V 93: An example of the third mode in Messiaen's modes of limited transposition.

V 94 Messiaen "Étoiles Exotiques": The pitch material comes from Messiaen's third mode; the rhythm imitates Messiaen's added value technique, pushing the music forward. It is based on a frament from Messiaen's Oiseaux Exotiques.

V 95 Yuasa *In* Cosmos Haptic *style*: This variation is an imitation of one of Joji Yuasa's piano pieces (*Cosmos Haptic*) which uses the same mode as Messiaen's *second mode of limited transposition*. A gentle *ostinato*

conveying a birthday greeting accompanies the free-flowing *TTLS* melody.

V 96 Takemitsu "Uninterrupted Song of Love": The chord structures of Toru Takemitsu's early piano works are imitated to give TTLS an atmosphere of abstraction. This one influenced by Pause Ininterrompue by Takemitsu.

V 97 Ligeti "Con Spirito": Fragments of György Ligeti's piano works are used to restate TTLS. The basis for this variation No. 3 from Musica Ricercata and No. 4 from Etude Book I.

V 98 Stravinsky "The Soldier's March": Derived from The Soldier's Tale by Igor Stravinsky. Odd and even time signatures alternate to add verve to the music.

V 99 Lutoslawski *In* Taniec *style*: The original melody of *Taniec* from Witold Lutoslawski's *Little Suite for Symphony Orchestra* is substituted with *TTLS*. The early orchestral suite by the Polish composer demonstrated how well-suited the Slavic fold idiom was to his modern style.

V 100 Kabalevsky *In* Clowns *style*: Most of the Russian composer's works had a clear tonal base. His piano pieces for children are quite popular and show his concise and unique music. This variation is based on *Clowns Op.* 30 No. 20.

V 101 Minimalism – *Minitude*: Patterns that are continuously repeated and slowly evolve are used in this variation. It demonstrates the

distinguishing characteristic of the mid-20th century style Minimalism.

V 102 Notation – *Phantasy*: Increasing complexity and diversity in new music led to the introduction of many fresh forms of notation. The score for *Phantasy* provides a visual idea of how the piece should be played. It provides a lot of latitude for performer interpretation since the timing and rhythm are free.

V 103 Using Numbers to Find a New Rhythm: V 103 demonstrates how a new rhythmic pattern for *TTLS* can be derived from the melody line. In this example, the number of semitones from the first note of the melody to each of the subsequent notes are counted providing the sequence of numbers 8-10-6-5-3.

V 104 The new rhythm of *TTLS*: To extend the sequence, reading the numbers in reverse and subtracting one from each can provide 2-4-5-9-7. Doing the same to that new sequence gives 6-8-4-3-1. Combine the three sequences and we have fifteen numbers. These can be converted into a rhythmic value based on semiquavers and assigned to a note of *TTLS*. The right hand in V 104 plays the new rhythm and the left hand maintains the timing and creates a steady background beat.

Many more variations can be generated from the new rhythm, as illustrated in the next four examples. V 105 Reinvention: Two voices decorated with large intervals and based on V 104. The notes of TTLS in A flat major are played by the left hand, accompanying the C major part performed by the right hand. At bar 12, the two hands are reversed with the right hand changing to A flat major while the left hand is in C major.

V 106 Tone Cluster and Graphic Notation: Another way of organising sound material that emerged in the 20th century was the tone cluster, or group of adjacent notes. V 106 is a structural shell in which geometric shapes represent the new rhythm from V 104.

V 107 Sudden Incident (Music Notation): The geometric shapes of V 106 are filled out with tone clusters and organised into a short piece.

V 108 Astralita – My Little Star (in the style of Julian Yu): The new rhythm of V 104 is evident in the left hand, while the right hand plays an intuitive, improvisatory contrapuntal passage in which TTLS is still discernible.

V 109 *Bagatelle*: All the notes of *TTLS* are in the treble clef and spread over two octaves in V 109. The notes in the bass clef are an inversion of them. The entire piece is composed of just these eleven pitches.

V 110 Pentatude: This variation is constructed around the number 5. The time signature is 5/8, every phrase is five bars in length, and the harmony consists mainly of fifth intervals.

A pentatonic (5-note) scale is also used near the end in the melody.

Composition with One Note

The following two variations are music for two *haiku*. The *haiku* is a short yet pithy classical Japanese poem. This style is reflected in the music. *TTLS* has been divided into three fragments: (a) a single note, (b) two notes and (c) three notes. The first *haiku* (*Autumn Evening*), used in V 111, uses only one note (a), to convey the feeling of loneliness expressed in the text. The second *haiku* uses the two notes in (b). An interlude that links the two *haiku* uses the pitch material from (c).

V 111 Autumn Evening V 112 Ancient Pool

Popular Music

The next group of variations incorporate *TTLS* into a great variety of musical genres.

V 113 Disco: The driving repetition of repeated quaver octaves in the bass line at a tempo of 120 crotchet beats per minute are hallmarks of this style of music that grew out of nightclubs and was featured in the film and soundtrack for *Saturday Night Fever*.

V 114 Ragtime: The quintessential example of this style of music is Scott Joplin's *Maple Leaf Rag*, written in 1899. Here the melody of *TTLS* is substituted for the original melody.

V 115 Boogie: A style of jazz music popular in the 1930s and 1940s. A pronounced rhythmic *ostinato* bass is played with the left hand while the right hand plays a variety of improvisations above it.

V 116 Jazz (*TTLS* with jazz style harmony): A style of music developed by Black musicians in America in the early 1900s, Jazz is rooted in improvisation and has a steady beat, a characteristically syncopate rhythm and distinctive tonal colours.

V 117 Blues: This style grew out of Black folk music and was popular in the early 20th century. V 117 keeps the basic 12-bar construction of blues as it's basis.

V 118 StAr KURA: Composers have always found inspiration for their compositions in folk music from around the world. Geographic and cultural differences give unique character to music from different areas. Japanese music uses various pentatonic scales. V 118, based on the folk tune *Sakura*, uses a distinctly Japanese pentatonic scale containing a minor second interval.

V 119 The Stars are High: Written in Chinese style, uses the most common form of the pentatonic scale. The texture reflects that of the Chinese *guzheng* zither, the 18 or 21-stringed instrument with movable bridges that can be plucked with the right or both hands.

Ornamentation in Chinese Folk Music

A common way to create new pieces in traditional Chinese music is to ornament older pieces. The original melody is kept but new notes are inserted between the pre-existing note, turning the piece into something completely different. The new version can be used as a starting point for still further ornamentation.

V 120 This shows *TTLS* with three generations of ornamentation.

V 121 Heterophony in Chinese Music: In traditional Chinese music many instruments play the same melody simultaneously but in slightly different ways. This is called *heterophony*. This variation uses the first and second generation melodies from V 120 with slight alterations between the two parts.

V 122 Beat in Peking Opera: The rhythmic accompaniment (notated in boxes on the score) is repeated while the aria is sung freely in the first section. In the Peking Opera style, the two do not need to be synchronised. A strong clapper beat in quarter time enters in the second section, propelling the music forward.

V 123 stAr-irang: The Korean folk song *Arirang* is played simultaneously with *TTLS* in this variation. A piece that combines two or more different melodies is called a *quodlibet* (see also V 45).

V 124 "The Starlark" (based on a Romanian folk tune Ciocirlia [The Skylark])

V 125 Philogamelania: The title has been coined especially for this piece that attempts to imitate the sound world of Indonesian gamelan music.

V 126 Finale – Passacaglia: This uses the form of an ancient passacaglia. The TTLS cantus firmus from the beginning of this book (V3 thru 7) is now used as a ground bass, and the music unfolds freely on top of it. Fragments from throughout the other variations return briefly in the first part of the piece as if saying goodbye to you. Hopefully our journey with *Twinkle Twinkle Little Star* will give you the inspiration to start or continue your own creative music journey.

