# The Art of Schillinger 

$\mathbf{r}_{3 \div 2}$

Piano Trio

## Annotated Score

Composed for the First International Schillinger Competition 2009 Sponsored by:

The Schillinger School of Music

## Composed by

## Daniel Leo Simpson

## April 2009

San Francisco, California USA

# The Art of Schillinger: 

$$
r_{3 \div 2}
$$

## Composition process:

The goals set for this piece were threefold:

1. To compose a piece exclusively using Schillinger techniques as far as I was able (i.e. have learned)
2. To compose a piece that was worthwhile and pleasing in which to listen.
3. A piece that the performers would find fun, interesting and exciting to play.

The first point deals with the competition rules. The second, because Schillinger takes a lot of criticism about being "music by the numbers" or "automatic music" the implication being "music without soul or inspiration." I wanted to therefore compose a piece that not only integrated Schillinger's techniques, but would also be a worthwhile piece of music based on the theory that, even if it is using techniques of the Schillinger System, if it's not worth listening to then how are we the better for it?

Finally, the third point, to come up with something that would be fun for the Fidelio Trio to play should the piece be chosen. I know they actively champion the music that many ambitious composers bring their way and I applaud them for doing so, but sometimes it's just nice to play something in the key of G! (In this case, the key of Gb!).

## The Analysis

The analysis can actually be better seen and heard on the Annotated Score with accompanying CD. So in the interest of space and time, I needn't go into it in great detail here, however I will add a list of techniques used in the composition on the next page. But first, a clarification:

The truth is, I was only introduced to the study of the Schillinger System of Musical Composition in September 2008. By January 2009 when the competition was announced, I was only finishing up Book 1 of the 12 books that comprise the compendious two-volume set. So this piece really contains techniques exclusively with Book 1, The Theory of Rhythm, since that's as far as I've hitherto progressed. The positive side to that is the piece does cover all the essential elements regarding that section of the book chapter by chapter. So in that sense, it is concentrated in that area and provides value in its focus.

The method of composition was this: I made a list of all essential proponents from each chapter in Book 1, and then began incorporating them all one by one as the piece progressed. In fact, it does so by almost following the book Chapter for Chapter as the piece unfolds, right up to the last bars with the fermata, which is introduced on the closing pages of Book 1! Next, this list I made and some very brief comments.

I appreciate having been able to complete this composition and thank The Schillinger School of Music for giving me the opportunity to do so.

The Composer
April 12, 2009

The Art of Schillinger: ${ }{ }^{3 \div 2}$
Techniques used:

1. $r_{3} \div 2$ - Everything revolves around this resultant: $[(2+1)+(1+2)]$
2. The fractioned resultant ${ }^{r} \underline{\underline{3} \div 2}$ is quickly added to the score through Expansion in Piano bar 5....
3. and is Balanced by the Violin in bar 7
4. The major generator ( $a=3$ where $t=\downarrow$ ) is introduced by the piano in bar 10 .
5. Diminution is introduced in bar 14 , Violin where $t=\varnothing$ )
6. The cello first introduces permutation of the resultant in bar 23
7. Violin, bar 42, introduces new material in the form of a sequence with the addition of $r 2$ from the 3 Series as shown, and is then picked up and imitated by the Cello and Piano.
8. The motive at bar 61 followed by dramatic silence in the next bar is taken from the $2^{\text {nd }}$ half of the 3:2 resultant ( $1+2$ ) and becomes an important motive to give relief to the generally continuous moving counterpoint.
9. The summation series explained in Book 1, Chapter 5 is used to introduce the $2^{\text {nd }}$ theme. This provided the composer with an excellent 'relief' from the 3:2 resultant previously developed.
10. More variety is added in the $2^{\text {nd }}$ theme by adding b1 of fractioned $3: 2$ in the violin at bar 75 and giving a nice contrast using the common denominator ( $t=\varnothing$ ) in the right hand of the piano. The Cello imitates the Violin two bars latter with the summation series but imitated at the $5^{\text {th }}$.
11. Circular permutation is introduced in the Piano at bar 81, b1 in Cello and major generator in Violin.
12. The Theme returns for the first time at bar 93.
13. New melodic material is introduced in bar 109 from Distributive Powers in the Square and Synchronization of the Binomial $(1+2)^{2}$ (from the 3 Series) and is developed over the next section.
14. The Closing Theme is introduced in bar 135 using $3: 2$ motives and extractions from the resultant.
15. Rests, durations, accents are introduced and provide an excellent contrasting section. This is where the composer is grateful to have a "system" to add new material simply and effortlessly to contrast the busy proceeding measures, and to successfully give relief to the performers and the ears of the listener. This is where the System really comes in handy.
16. At bar 163, a $2^{\text {nd }}$ closing theme is introduced by cubing the Trinomial $(3+2+1)$. For me, this is an exciting section and demonstrates how the Schillinger System can organically give rhythmic relief. All of a sudden it no longer sounds like $3 / 4$ any longer. No way would I have come up with this.
17. The exposition concludes at bar 178. I was studying Bach's "Art of the Fugue" at the time I was introduced to Schillinger last fall, (hence the title, "The Art of Schillinger) and was curious to see if I could extend the resultant into a fugal treatment which is found sprinkled with previously introduced techniques such as permutations in the counter-themes.
18. The sequence from bar 42 returns at bar 234 with the Violin and Cello reversing parts.
19. The piece then develops the material according to concepts previously introduced.
20. Bar 403 introduces Variable Velocities from Book 1, Chapter 14 and concludes with a "Schillinger Fermata" in bars 420-421 as illustrated on the last page of Book 1 of Schillinger's System of Musical Composition. A fitting conclusion.

## The Art of Schillinger ${ }^{r} 3 \div 2$

Composed for the First International Schillinger Competition 2009 Sponsored by<br>The Schillinger School of Music<br>First Place Winner<br>In collaboration with<br>The University of University of Hertfordshire<br>United Kingdom

## Composed by

Daniel Léo Simpson<br>April 2009<br>San Francisco, California<br>United States of America

Annotated Score

# The Art of Schillinger <br> ${ }^{r} 3 \div 2$ <br> (pronounced "r-3-2") 

Daniel Léo Simpson
San Francisco, USA February-April 2009 The Schillinger School of Music lst International Competition
Con Moto d. $=72$


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daniel@danielsimpson.com


$$
r 3 \div 2+r 3 \div 2 \text { Expanded }
$$


sequence on 52 of 3 Series (see pic below)



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summation series $1,2,3,5,8$


I-Schillinger Piano Trio - Simpson - annotated - April 11, 2009


Grouping by＇$a$＇：$a=\frac{3}{9}, \quad \frac{a^{2}}{a}=a I, \quad \frac{9}{3}=3 T$

| $\stackrel{3}{4}$ | $1=d$ | d」」 | dJ」 | d．」d |
| :---: | :---: | :---: | :---: | :---: |
|  | ${ }_{\text {c }}$ | d． | d | d． |
|  | ${ }^{\text {cd }}$ | d」d | 」」」 | d」d |
|  | a | d． | d． | d． |
|  | ${ }^{\text {b1 }}$ | d d | dd |  |
|  | $\mathrm{b}^{2}$ |  |  | dd |
|  | r | 」 」 | 」」」 | d d |



Balanced: ${ }^{r} 3 \div 2+r 3 \div 2+[3(3-2)=3]=$
$[(2+1)+(1+1+1)+(1+2)]+[(2+1)+(1+2)+3]$



Square of binomial - Factorial

Synchronization of the binomial with it's distributive square - Factorial

$$
S=a(a+b)+b(a+b)
$$

$$
(a+b)^{2}=a^{2}+a b+a b+b^{2}
$$

3 Series (2+1), (1+2)


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(Tol. 1 pg .74 , Square of a Binomial)
$\mathrm{sq}=(2+1)=[4+2+2+1]$




Combination of Durations, Rests \& Accents
(Schillinger System Book I pg.57)



Cube of Trinomial: $(\mathbf{3}+\mathbf{2}+\mathbf{1})$
Synchronization of the Cube.
$(3+2+1)^{3}-3[(9+6+3)+(6+1+2)+(3+2+1)]+$
$2[(9|6| 3)|(6|4| 2)|(3|2| 1)] \mid$
$1[(9+6+3)+(6+4+2)+(3+2+1))]$
Syncifrorizalion or ithe Scyuare.
$[(27+18+9)+(18+12+6)+(9+6+3)]$
$[(18+12+6)+(12+8+4)+(6+4+2)]$
$[(9+6+3)+(6+4+2)+(3+2+1)]$
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to Fugue here





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sequence on r2 of 3 Series


motive from $r 3 \div 2$

summation series




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Combination of Durations, Rests \& Accents
(Schillinger System Book Ipg.57)



Cube of Trinomial $(3+2+1)$
Syminnonizalion of the Cube
$(3+2+1)^{3}=3[(9+6+3)+(6+4+2)+(3+2+1)]+$ $2[(9+6+3)+(6+4+2)+(3+2+1)]+$ $1[(9+6+3)+(6+4+2)+(3+2+1))]$

Synchronization of the Square:
$[(27+18+9)+(18+12+6)+(9+6+3)]$
$\lceil(18|12| 6)|(12|8| 4)|(6|4| 2)]$




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Variable Velocities Vol. 1 Ch. 14
Arithmetical Progression
+3 Constant $\mathrm{t}=\$ 12,9,6,3$




Femmici \& Raliemanac


Suiance washisved ì 6 bars:

2.) $13: \epsilon-(3:)$
3.) $12 \div \epsilon-(2 \div$ :
4) The halanicel trimomia is rivaine: fi $\div f-$ i
5) The balancel trinoriai is ojainey $8-\overline{2}-\bar{s}$
5.) $4: 3: 1$ - Trivonual: Fiallentarde
7) 2-: - Fatio: Frrmatc (2 groupo of Cfolleved by fomata baro of 1 group が

Annotated Score

# The Art of Schillinger 

$$
\begin{gathered}
\boldsymbol{r}_{3} \div \underset{\text { (pronounced " } r-3-2 ")}{ }
\end{gathered}
$$

Daniel Leo Simpson
San Francisco, USA February-April 2009 The Schillinger School of Music 1st International Competition
Con Moto d. $=\mathbf{7 2}$


$r 3 \div 2+r 3 \div 2$ Expanded

April 11, 2009


April 11, 2009
sequence on $\boldsymbol{r} \mathbf{~ o f ~} \mathbf{3}$ Series (see pic below)


April 11, 2009


April 11, 2009


April 11, 2009


April 11, 2009


Grouping by＇$a$＇：$a=\frac{3}{9}, \quad \frac{a^{2}}{a}=a T, \quad \frac{9}{3}=3 T$

| $\underline{3}$ <br> 4 | $1=1$ | d」d | 」d」 | 」 」 」 |
| :---: | :---: | :---: | :---: | :---: |
|  | cp | d． | d． | d． |
|  | cd | 」」」 | 」 」 」 | 」」」 |
|  | a | d． | d． | d． |
|  | b1 | d d | d d |  |
|  | b2 |  | d d | d d |
|  | r | d d | 」 」 ل | d d |

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Balanced: ${ }^{r} \underline{\underline{3} \div 2}+\mathrm{r} 3 \div 2+[3(3-2)=3]=$
$[(2+1)+(1+1+1)+(1+2)]+[(2+1)+(1+2)+3]$



Square of binomial - Factorial

$$
(a+b)^{2}=a^{2}+a b+a b+b^{2}
$$

Synchronization of the binomial with it's distributive square - Factorial

$$
S=a(a+b)+b(a+b)
$$



April 11, 2009



April 11, 2009


Combination of Durations, Rests \& Accents
(Schillinger System Book I pg.57)


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Cube of Trinomial: $(3+2+\mathbf{1})$
Synchronization of the Cube:
$(3+2+1)^{3}=3[(9+6+3)+(6+4+2)+(3+2+1)]+$
$2[(9+6+3)+(6+4+2)+(3+2+1)]+$
$1[(9+6+3)+(6+4+2)+(3+2+1))]$
Synchronization of the Square:
$[(27+18+9)+(18+12+6)+(9+6+3)]$
$[(18+12+6)+(12+8+4)+(6+4+2)]$
$[(9+6+3)+(6+4+2)+(3+2+1)]$
April 11, 2009


April 11, 2009
to Fugue here
(8)---------------------।


April 11, 2009


Balanced: $\quad 3 \div 2+r 3 \div 2+[3(3-2)=3]=$


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April 11, 2009
sequence on r2 of 3 Series


April 11, 2009

motive from r $3 \div 2$


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April 11, 2009


April 11, 2009


April 11, 2009


April 11, 2009


April 11, 2009


April 11, 2009


Combination of Durations, Rests \& Accents (Schillinger System Book I pg.57)


April 11, 2009


Cube of Trinomial: $(3+2+\mathbf{1})$
Synchronization of the Cube:
$(\mathbf{3}+\mathbf{2}+\mathbf{1})^{3}=3[(9+6+3)+(6+4+2)+(3+2+1)]+$
$2[(9+6+3)+(6+4+2)+(3+2+1)]+$
$1[(9+6+3)+(6+4+2)+(3+2+1))]$
Synchronization of the Square:
$[(27+18+9)+(18+12+6)+(9+6+3)]$
$[(18+12+6)+(12+8+4)+(6+4+2)]$
$[(9+6+3)+(6+4+2)+(3+2+1)]$
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(8)


April 11, 2009


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Fermata -


Fermata \& Rallentando


Balance is achieved in 6 bars:
1.) $\mathbf{r}_{3} \div 2=(3 \times 2)=6$ (i.e. the product of the two generators)
2.) $18 \div 6=(3 \div 1)$
3.) $12 \div 6=(2 \div 1)$
4.) The balanced trinomial is obtained: $6 \div 6 \div 6$
5.) The balanced trinomial is obtained: $8 \div 2 \div 8$
6.) $4 \div 3 \div 1=$ Trinomial: Rallentando
7.) $2 \div 1=$ Ratio: Fermata (2 groups of 6 followed by fermata bars of I group of 6 )

# The Art of Schillinger $r_{3 \div 2}$ 

## Piano Trio

## Violin

Winner of the First International Schillinger Competition 2009
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United Kingdom

## Composed by

# Daniel Léo Simpson 

April 2009
San Francisco, California USA

## Violin

# The Art of Schillinger $r 3 \div 2$ <br> (pronounced: r-3-2) 

Daniel Léo Simpson
San Francisco, USA
February-April 2009
Con Moto d. $\mathbf{7 2}$




121





## 205





315


April 20th, 2010

(8) ${ }^{----------------। ~}$

legato


$$
415
$$



April 20th, 2010

# The Art of Schillinger $r_{3 \div 2}$ 

Piano Trio

## Violoncello

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In collaboration with
The University of University of Hertfordshire
United Kingdom

## Composed by

# Daniel Léo Simpson 

April 2009
San Francisco, California USA

Daniel Léo Simpson
San Francisco, USA
February-April 2009


46

$f$



103


113


138



155


164


207





April 20th, 2010


April 20th, 2010

# The Art of Schillinger $r_{3 \div 2}$ 

Piano Trio

## Pianoforte

Winner of the First International Schillinger Competition 2009
Sponsored by
The Schillinger School of Music

In collaboration with
The University of University of Hertfordshire
United Kingdom

## Composed by

# Daniel Léo Simpson 

April 2009
San Francisco, California USA

# The Art of Schillinger <br> $r 3 \div 2$ <br> (pronounced: $r$-3-2) 

Daniel Léo Simpson San Francisco, USA February-April 2009



Full Score


Full Score
4


April 20th, 2010

Full Score




April 20th, 2010

Full Score


Full Score


April 20th, 2010

Full Score
8


legato


Full Score


## Full Score



April 20th, 2010

Full Score
12


April 20th, 2010

Full Score


April 20th, 2010

## Full Score



Full Score


April 20th, 2010

## Full Score



Full Score


April 20th, 2010

## Full Score


$m p$


Full Score


April 20th, 2010

Full Score


Full Score


## Full Score

22



April 20th, 2010

Full Score


April 20th, 2010

Full Score


# The Art of Schillinger <br> $r 3 \div 2$ <br> (pronounced: $r$-3-2) 

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Full Score


Full Score
4


April 20th, 2010

Full Score




April 20th, 2010

Full Score


Full Score


April 20th, 2010

Full Score
8


legato


Full Score


## Full Score



April 20th, 2010

Full Score
12


April 20th, 2010

Full Score


April 20th, 2010

## Full Score



Full Score


April 20th, 2010

## Full Score



Full Score


April 20th, 2010

## Full Score


$m p$


Full Score


April 20th, 2010

Full Score


Full Score


## Full Score

22



April 20th, 2010

Full Score


April 20th, 2010

Full Score


