

# **Theory of Music – Jonathan Dimond Stravinsky**

(version October 2009)

## **Introduction**

Igor Stravinsky (1882-1971) was one of the most internationally-acclaimed composer conductors of the 20<sup>th</sup> Century. Like Bartok, his compositional style drew from the country of his heritage – Russia, in his case. Both composers went on to spend time in the USA later in their careers also, mostly due to the advent of WWII. Both composers were also exposed to folk melodies early in their lives, and in the case of Stravinsky, his father sang in Operas. Stravinsky's work influenced Bartok's – as it tended to influence so many composers working in the genre of ballet. In fact, Stravinsky's influence was so broad that Time Magazine named him one of the most influential people of the 20<sup>th</sup> Century! [http://en.wikipedia.org/wiki/Igor\\_Stravinsky](http://en.wikipedia.org/wiki/Igor_Stravinsky)

More interesting, however, is the correlation of Stravinsky's life with that of Schoenberg, who were contemporaries of each other, yet had sometimes similar and sometimes contradictory approaches to music. The study of their musical output is illuminated by their personal lives and philosophies, about which much has been written. For such writings on Stravinsky, we have volumes of work created by his long-term companion and assistant, the conductor/musicologist Robert Craft. {See the Bibliography.}

## **Periods**

Stravinsky's compositions fall into three distinct periods. Some representative works are listed here also:

### **The Dramatic Russian Period (1906-1917)**

The Firebird (1910, revised 1919 and 1945)

Petrouchka (1911, revised 1947))

The Rite of Spring (1913, revised 1947)

Three Pieces for String Quartet (1914, revised 1914, 1918 & 1928)

### **The Neo-Classic Period (1917-1951)**

The Soldier's Tale (1918)

Pulcinella (1919)

Symphonies of Wind Instruments (1920, revised 1947)

Octet for Wind Instruments (1923, revised 1952)

Oedipus Rex (1927, revised 1948)

Apollon Musagete (1928)

Symphony of Psalms (1930, revised 1948)

Symphony in C (1940)

Mass (1948)

The Rake's Progress (1951)

### **The Serial Period (1951-1957)**

Three Songs from William Shakespeare (1953)

Canticum Sacrum (1956)

Agon (1957)

Threni (1958)  
Sermon, Narrative and Prayer (1961)  
The Flood (1962)  
Abraham and Isaac (1963)  
Variations (1964)  
Requiem Canticles (1966)  
The Owl and the Pussycat (1966)

There is a trend here, which is from a Dionysian aesthetic to an Apollonian one. That is, the subjective, romantic style of the dramatic Russian period (Dionysus being the Greek God of wine, ecstasy and disorder) is replaced by the objective, cognitive style from the 1930's onward (Apollo being the Greek God of harmony, order and reason).

There is also evidence of an interest in religious subject matter (from the Old Testament) in Stravinsky's third period.

## Influences

Aside from Stravinsky's aforementioned childhood influences - his father's singing and the general exposure to Russian folksong - Stravinsky's principal compositional influences were The Russian Five (the so-called "mighty handful" including Balakirev, Borodin, Cui, Mussorgsky, and Rimsky-Korsakov), and Achille-Claude Debussy (1862-1918).

Debussy was for Stravinsky what Mahler was for Schoenberg, yet Debussy was a mentor from whom, despite his tireless efforts, Stravinsky never succeeding in receiving satisfactory recognition.

*"Oh, Mr Debussy, thank you for attending; I owe so much to you as a composer..."* (Stravinsky to Debussy, who attended one of the first performances of "The Firebird")

Debussy:

*"Yes, I can hear that!"*

Dining together later, Stravinsky urged Debussy to tell him what he really thought of The Firebird.

Debussy:

*"Well, you have to start somewhere!"*

## Listening and Reading

Listen to Debussy's "Nuages" ("Clouds") from "Trois Nocturnes" (1899), notated in the first example, below.

Then listen to Stravinsky's "The Song of The Nightingale" (the second example below). Note the similarities.

The image shows two systems of musical notation. The first system is for Clarinet (Cl.) and Bassoon (Bsn.) in 6/4 time, marked *pp*. The second system is for piano in 3/4 time, marked *p*. Both systems feature a repeating six-note ostinato pattern.

## Dramatic Russian Period Techniques and Characteristics

The Firebird ballet, arguably Stravinsky's first mature work (though about a dozen works preceded it), contains so many of the techniques and characteristics we ascribe to the sound that is Stravinsky. In this composition, the 27-year-old Stravinsky tried to arrogantly revolt against his old teacher, "poor" Rimsky-Korsakov.

**Watch** the introduction and first four scenes of The Firebird DVD.

### OSTINATO

Repeating figures are commonly used to drive the music forward. They contribute a layer of unity and familiarity to an overall texture, upon which other layers can be added.

The Firebird commences with the following ostinato played by the cello and basses (but written in 12/8). It continues for the entire introduction.

The image shows a single line of musical notation in 3/4 time. It begins with a key signature of two flats (Fb Major) and contains a six-note ostinato pattern. The key signature changes to one flat (Bb Major) for the remainder of the phrase.

### POLYRHYTHM AND ODD METRE

Stravinsky has a reputation for rhythmic interest, and uses syncopation, polyrhythm, unusual time signatures and groupings of pulse to weaken the feeling of the predictable evenly-spaced downbeat.

The 6-note ostinato from the introduction of The Firebird can be grouped in 2's or 3's, and rhythmic interest increases with the addition of the superimposed dotted quarter note 2:3 polyrhythm (played by the trombones/bassoons).

**Watch** the introduction of The Firebird DVD as conducted by Stravinsky.

Complex textures from superimposing various subdivisions and groupings are often created in Stravinsky's work. **Read and Listen to the following examples:**

Examine the piano, piccolo and flute septuplets (with nestled triplets) in Petrouchka from rehearsal no.3 (The Shrove/Tide Fair).

Listen for the 3+2+2 followed by 2+2+3 groupings of 7/4 in the finale of The Firebird (rehearsal no. 206).

Contemplate the ethereal effect of the celeste 11-tuplets in the introduction of The Firebird leading up to rehearsal no.3.

Attempt to conduct the mixed-metre passages from rehearsal no.104 of The Rite of Spring (Glorification of the Chosen One).

### TRITONES

The prominence of the tritone interval is prevalent, both melodically and harmonically. This interval is a common one separating melodies of a bitonal nature {see Polytonality, below}, and Stravinsky frequently used scales that contain tritones as source material for his melodies.

The opening ostinato from introduction to The Firebird that we examined before contains alternating E Major (Fb major) and Bb major sounds. Furthermore, there is a tritone between the first notes of the two groups of three in the bass line (Ab and D).

### SLOW "TRILLS"

Slow oscillations between diametrically opposing sounds. (This effect is a little bit like what we experience in the beginning of Schoenberg's *Farben*.) In the opening of Petrouchka, we have different speeds of tremolo between the horns and clarinets.

The First Part - The Shrove/Tide Fair **Petrouchka** Stravinsky

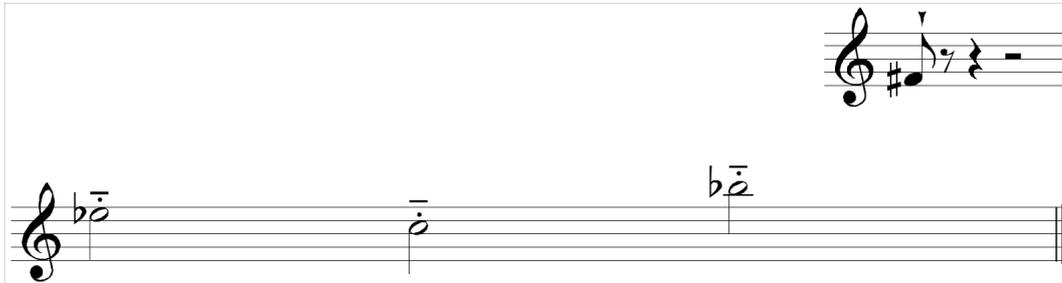
The image shows a musical score for two instruments: Clarinet in Bb and Horn in F. The score is in 3/4 time and consists of four measures. The Clarinet part features a tremolo of a single note (G4) over the first two measures, followed by a single note (G4) in the third and fourth measures. The Horn part features a tremolo of a single note (F3) over the first two measures, followed by a single note (F3) in the third and fourth measures. The two parts are in a bitonal relationship, with the Clarinet in Bb and the Horn in F.

### FIRST INVERSIONS

$^6_3$  (first inversion) chords are prominent.

## STACCATO/LEGATO

Short and long articulations coexist in the orchestration. The Stravinskian staccato is about articulation more than length. This marcato articulation bites! {See the first example below.} The inspiration for this type of marcato articulation is probably Russian folk, and it seems so fitting in its usage in the Russian Dance from Petrouchka (from rehearsal no.73).



The “staccato in legato”, above, is an articulation that became prominent in Stravinsky’s Neo-Classic period (also known as a “sforzando in piano”). It is a pointed sound. It probably originates from the stage, where such articulation indicates movement to the dancers. (The second example above is taken from Octet, Movt.1, first theme.)

## PHASING

Ideas “position shift” to change emphasis and “emancipate” the music from the barline.

## MOBILE

Related to phasing and ostinato, a mobile is created when two or more ostinati of different lengths and/or starting points are layered in order to create a multi-leveled texture built on phasing repeated patterns.

## REVISION

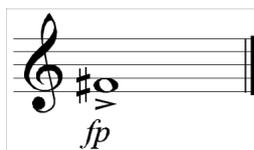
Though not a compositional technique itself, it is interesting to note that Stravinsky took the time to revise many of his compositions. (Refer to the short list at the start of this document.) These not only reflected his changing “mood” and feeling about the composition. There was probably also a financial motivation, in that there was a 25-year rule where copyrighted material entered public domain in that part of the century. Furthermore, with his travels from Russia to France to the USA, he sought to maintain territorial control on his works.

(As an aside, Stravinsky was delighted to discover the symbol his initials made when superimposed!)

The Firebird Suite contains just the dramatic orchestration portions from the original ballet.

## NOTE ASSOCIATION

We have learnt about the use of leitmotifs in the dramatic works of Wagner. In Stravinsky’s music, there are certain notes and instruments that create gestures that mean specific things in the story of the music. For example:



This represents struggle – such as the struggle of the Firebird being caught by Ivan. It is first played *fp* by the horns in the Introduction (at 1:36 of the LSO recording of the suite). Interestingly, F# also appears in Petrouchka at key sections as Petrouchka’s (and arguably Stravinsky’s!) personification.

A minor represents a demonic key for Stravinsky, and his struggle with the idea of death. Stravinsky called A minor the “grey key”.

B major represents purity and femininity to Stravinsky. It is used as the key for The Maidens/Princesses in The Firebird, and also for the wedding of Ivan and Tsarevna in the conclusion. [Watch scenes 4 & 5 of the DVD]

### FRAGMENTATION

A melodic theme or idea is segmented and adjoins contrasting material. This technique sounds like the score has been written out and then the composer has used “cut and paste” to create a new version. {See “Stratification”}

### POLYTONALITY

The opposition of contradictory tonal centres overlaid harmonically and/or melodically is a recurring trait in Stravinsky’s music. It gives the ear a kind of multiple of perspectives, as you can choose to hear the music from the context of different keys simultaneously.

The most famous example would be the opening of “Dances of the Young Girls” from “The Rite of Spring”.

**Examine** the score from rehearsal no.13.

This section can be summarized as Eb7 (1<sup>st</sup> inversion) over Fb Major. This “polytriadicism” creates conflict and unrest.



Diaghlev to Stravinsky, as he was working on the score for the *Ballets Russes*:

“Does that go on very long?”

Stravinsky, at the piano:

“Very long, my dear!...”

(*The Essential Igor Stravinsky*, Sony Classical, Disc 2 track 23)

In Petrouchka, the famous “Petrouchka chord” is inherently bitonal. It can be analysed as C Major above F# Major. Note the tritonic relationship and the resulting Bb octatonic (2:1) scale. This is featured in the Second Part (In Petrouchka’s Booth) both melodically (the Clarinets from rehearsal no.95), and harmonically (the piano tremolos at rehearsal no.100).



## STRATIFICATION

Stratification also relies upon opposition – a concept discussed already in our lecture on Chromaticism. Stratification is the spatial separation of musical ideas, juxtaposed in time. It might involve a glaring or subtle contrast due to changes in instrumentation, register, harmony, or rhythm. There is often one element of connection between the layers – for example, an interval.

The two techniques Stravinsky utilized to create opposition between strata are:

- 1) Bridge. A bridge is not only a transition section, but can point towards its own future development, taking on a life of its own, thereby participating in an interlocking pattern.
- 2) Divergence. The division of a single layer into two or more layers, which thereby gain independence.

{See Cone, “The Progress of a Method”}

Petrouchka (1911) is a study in Stratification. The formal elements of the First Part (“The Shrove / Tide Fair”) are:

- A** Tremolos from bar 1 (clarinets and horns). (The flute melody melodicizes these tremolos.)
- A1
  - A2
  - A3 (trumpets)
- B** Block chords, from rehearsal no.7.
- B1 (full, rich, brassy)
  - B2 (chamber version, pizz.)
- C** Pulsing rhythm, from rehearsal no.13
- C1 (pulsing strings with bass & percussion hits)
  - C2 (trumpet fanfare)
- D** Organ-grinder’s tune, from rehearsal no.18
- D1 (waltz, with clarinets and flutes)
  - D2 (2/4, lead by flutes (+ triangle) firstly, then trumpet) from rehearsal no.23

**Listen** to Petrouchka and **read** the score from the beginning to rehearsal 23.

**Identify** the bars where the formal elements of stratification listed above occur.

This material is continually subjected to “cut and paste”. **Identify** the bars where the formal elements of stratification listed above occur through rehearsal 56.

Such a formal development means “maximization of the minimum”.

{Salzman}

**Listen** to Graham Abbott’s “Keys to Music” discussion of Petrouchka.

### **INTERLOCK**

Cubism embraces interlock and stratification in visual art. I believe it is largely due to Stravinsky’s employment of these principals in music that he is regarded as the “Picasso of music”. (Stravinsky collaborated with Picasso himself on the Neo-Classic ballet “Pulcinella”).

In Cubism, interlock is when material is dislocated into smaller parts and assembled so that strong borders appear between these disjunct parts. It creates a strong visual “buzz”, which is felt but not as readily understood.

In music, interlock concerns the influence that one idea exerts upon the music despite being fragmented. It is thus a desired effect from applying the stratification technique. For example, idea ‘A’ exerts influence on the whole in the following sequence:

A B A’ B’ A” B”

{See Cone, “The Progress of a Method”}

### **SYNTHESIS**

The rhythmic, contrapuntal and harmonic unity that underlies the composition. Synthesis usually involves the reduction and transformation of one or more elements. The result of synthesis is that contrasting elements are brought into increasingly close relationship with each other, assimilating contrasting rhythms, contrapuntal melodies or harmonies to the point that they work as a unified whole.

### **CONTEXTUAL HARMONY**

Functional harmonic relationships are diluted by the use of the aforementioned techniques. The bass line that opens The Firebird goes on to be treated as a melodic idea unto itself, not always demanding the relevant chords above.

### **PRIMITIVISM**

The artistic movement of primitivism related to Stravinsky’s Dionysian aesthetic, as featured in the works of his first period. People often cite the aggressive, confronting rhythms of works such as The Rite of Spring as being the musical embodiment of primitivism. The use of percussion and the subject matter of the ballet (Pagan fertility rituals) are also inherently primitive.

### **VIRTUOSIC INSTRUMENTAL TECHNIQUES**

The famous bassoon melody that opens The Rite of Spring, soaring around C, D and E in the top of the treble clef, was written because Stravinsky intimately knew the colours and effects of the instrumental forces for which he wrote. Though more easily scored for English horn or oboe, he chose bassoon in this instance because of the particular strained timbre at this extremely high register. Several decades later, when generations of

bassoonists had practiced and embraced this register and specific passage, Stravinsky declared:

*“Had I known that bassoonists would have been able to play it like that I would have written it another major third higher!”*

The trombone glissandi in The Firebird (Infernal Dance of All Kastchei’s Subjects) is another example of pushing instruments to their natural limits. In the first rehearsal the principal trombonist declared it “impossible”. Stravinsky:

*“Give me your trombone!”*

**Watch** from around 20’ of the “Stravinsky conducts” version of the DVD. **Listen** to 1:35 from the LSO version of The Firebird suite.

## Neo-Classic Period

### Techniques and Characteristics

From 1917 Stravinsky was influenced by a more cosmopolitan world, evidenced by jazz (popular American) music finding its way to and embraced by Europe.

#### CHARACTERISTICS OF STRAVINSKY'S NEO-CLASSICISM

- Pointed articulations (“sforzando in piano”)
- Diatonicism
- Pan-diatonicism
- Voicings with unique note doublings and “wrong” (“blues”?) notes (such as double-octave doublings, and often 1<sup>st</sup> and 2<sup>nd</sup> inversions)
- Influence by jazz
- Influenced by Classical/Baroque composers (e.g. Pergolesi and Tchaikovsky) and forms (e.g. symphony, fugue, concerto grosso)
- Objective (“*Music expresses nothing but itself*”)
- Cool (restrained) in mood
- Light in texture and feeling
- Dispassionate joy
- Apollonian aesthetic
- Melodies based on scales (not just tetrachords)
- Key signatures
- Colour analogies for chords and notes
- Thematic interest in ancient Greek mythology

#### THREE PIECES FOR STRING QUARTET (1914)

I see Three Pieces for String Quartet as a piece that lies between the Dramatic Russian and Neo-Classic Periods. A peculiar and rarely-heard piece, this composition contains elements that point toward the method of composing he embraced from 1917-1951. It was also revised and rearranged in later in 1914, and in 1918 and 1928.

In his true obsessive form, Stravinsky begun this work the morning after the score for The Rite of Spring was completed! (according to Heiss.) The three movements are:

1. Dance
2. Little tych
3. Canticle

*Dance* features the technique of mobile. The strings are given very specific bow-marks to illicit the phrasing and groupings necessary to strengthen the mobile effect and the dance-like style generally.

The cello has a pizzicato 7-beat ostinato, grouped 3+2+2. (It is played 14 times, yielding 98 beats).

Violin 1 plays the melody with a 23 beat period (after which the bowings drop out from the score.) Its bowings accentuate groups of 3 quavers. It sounds the 23 beat period 4 times, plus the first 6 beats of the next phrase (yielding 98 beats).

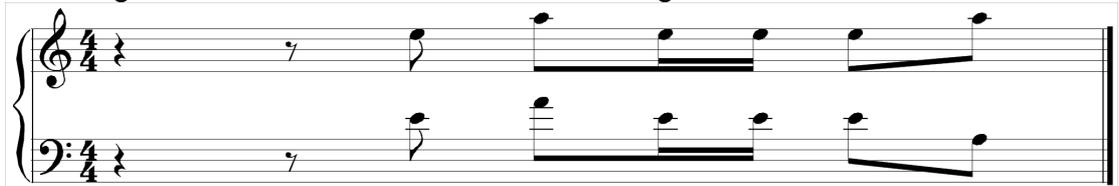
Violin 2 is not periodic – the size of the pauses between statements vary. It plays a descending marcato figure.

There is a pattern of decreasing distance between the start of Violin 1 and Violin 2's 4-note statements. The pattern is:  
8 – 7 – 3 – 1 – then simultaneously.

*Little tych* is about a clown Stravinsky saw in London, and its jerky movements (Stravinsky & Craft, 1960, p.95). It features the technique of stratification, with the following layers interrupting each other:

**A** Triplets. “Groaning” motive featuring portamenti. Minim=76 (so crotchet triplets give rise to a surface speed of 228). There are 6 initial statements emphasizing A.

**B** Interruption of “Groaning” motive with a “fanfare”-like cadence featuring interval of the 5th: Note A featured again.



**A** Triplets. “Groaning” motive featuring portamenti. There are 12 statements in A this time. No viola (cello covers its part.) Motive B is overlaid after the first 6 of these statements.

**C** “Sweet” motive. Initially by Cello and Violin 1, in 2-octave spacing - a characteristically sweet Stravinsky sound. Note Bb emphasized. Quaver=152 (same pulse as B).

**D** Allegro. Cadences to Bb. Hard attacks.

**E** 3:2 polyrhythm setup, as a 6/8 and ¾ hemiola. Polychord of D major over Eb major. Note Bb emphasized. Fortissimo.

Try to follow the successive stratification aurally.

## APOTHEOSIS

The last piece, *Canticle*, sounds like a liturgical Russian Orthodox chant – religious-sounding in a ritualistic and almost meditative and other-worldly style. It contains the first incidence of an “apotheosis” section – a passage of music that represents the ascendance of a soul, becoming at one with God. Apotheosis sections are to be found peppered throughout Stravinsky’s Neo-classic compositions – Symphonies of Wind Instruments, Octet, Apollo, Symphony of Psalms, etc. The origin of the word is Greek, and refers to the glorification or deification of an individual to a divine level.

*Canticle* contains three sections itself, being *Chorale*, *Chant*, and *Refrain*. The last section almost educes the smell of incense, and is revered by Stravinsky as one of his favourite moments in composition (according to Heiss.)



## THE SOLDIER'S TALE (1918)

Scored for clarinet, bassoon, cornet, trombone, violin, double bass and percussion, this unusual ensemble was both very portable/practical for its purpose (of war-time entertainment) and allowed for the jazz/classical mix that the piece required.

The narrator that joins the ensemble recounts a Russian parable about a soldier who trades his fiddle to the devil for a book that predicts the future of the economy. The fiddle is symbolic of his soul, and instrumentally is covered by the violin part, of course. The trombone represents the king and the percussion, the devil in the story.

*"It is the first dramatic piece I wrote where the bad guys won – I will probably write like this for the rest of my life...!"*

(Stravinsky, according to Heiss.)

Full of mixed metre, dance-like bass lines, "classical" arpeggiated figures and groovy ostinatos, this is a stimulating theatrical work.

[[Listen](#) to Alban Berg quartet CD and [read](#) score.]

## SYMPHONIES OF WIND INSTRUMENTS (1920, REVISED 1947)

### Introduction - Background to the Composition

"Symphonies of Wind Instruments" was completed in 1920. It is approximately 9 minutes in duration. It was premiered in London on June 10, 1921. This performance provoked a scandal, with popular opinion being that it's introduction sounded like a braying donkey! [Craft, 1992, p.373]

The composition is dedicated to Stravinsky's "dear friend" Claude Achille Debussy, whose death in 1918 meant the loss of a compositional mentor whom he admired and strived to embrace.

The *Revue Musicale* commissioned and published a piano work from Stravinsky as part of a memorial anthology of piano pieces in memory of Debussy. This was premiered in Paris on January 24, 1921 [Craft, 1992, p.380], and was to become the chorale ending of "Symphonies of Wind Instruments".

The title "Symphonies" refers to the collective assemblage of wind instruments, rather than to the symphonic form, which the work does not resemble. The title thus has abstract implications - "music that expresses nothing but itself" as Stravinsky has once said. The choice of orchestration in Stravinsky's compositions seems to be intrinsically tied with the composition itself, and the choice of wind instruments as the instrumentation for the ultimate form of this composition seems to be linked with the aforementioned abstractionism, and his Neo-Classic mood. "Sinfonias" date back to the Renaissance and early Baroque periods.

In this work (and other works from this period) there is an aura of refinement, and despite being a homage, "Symphonies" has no need for sentimental strings [Grout, 1988, p.849].

### Historical Context of the Composition

“Symphonies of Wind Instruments” appears as one of the early defining works of Stravinsky’s Neoclassical period (1917-51), just before his “Octet for Wind Instruments” (1922-3), and just after the ballet “Pulcinella” (1919).

The revised edition dated 1947 actually has a complicated, unclear and controversial history, sufficiently large to be a thesis unto itself! Indeed it is difficult to pinpoint the source of many of the “corrections” which find themselves in this later edition, as one has to go back to Stravinsky’s numerous sketches, orchestrations (including the original piano work), a pirated Kalmus edition, and the many correspondences with the various editors and conductors who all had a hand to play in the work’s metamorphosis over the years [Craft, 1992, p. 375-376].

The Neo-Classic mind-frame was not unique to Stravinsky at this time in Europe, and around the 1920’s there were such premieres as Francis Poulenc’s “Pastoral Concerto” (1928) for harpsichord and chamber orchestra. The jazzy influences that found their way into Stravinsky’s preceding compositions such as “Ragtime” (1919) were occurring in the 1920’s with Darius Milhaud’s “Creation of the World” (1924). And the industrial age was coming alive in the programmatic “Pacific 231” of Arthur Honegger (1923).

Stravinsky was a truly prolific composer, and sometimes worked on compositions simultaneously or at least in immediate succession. His manuscript sketches reveal in fact that ideas from “Ragtime” and “Symphonies of Wind Instruments” shared the same pages, and there is manuscript evidence for these parallel conceptions around Debussy’s death in 1918 [Craft, 1992, p. 372].

### Initial Observations

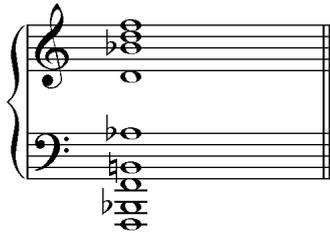
There are a few initial observations that can serve as illustrations of Stravinsky’s continued employment of the layer-based techniques of Stratification, Interlock and Synthesis.

At 46 [4:54] Stravinsky stratifies the motif originally introduced at 2 bars before 6, along with the new motif at 6, and the motif at 3. Although initially feeling as a bridge passage, section 46 throws together these contrasting motifs, with their opposing registers and instrument groupings, to the point that there is an effect where each layer anticipates its next entry, eventually culminating in the *tutti* passages from 54 [5:26] – the point of synthesis. (The rehearsal numbers refer to the 1947 edition, and the track times to the Salonen recording.) {For more information, see Cone, “The Progress of a Method” .}

The opening chords have a G centre and a bell-like resonance. Note the deceptive change to the minor-9<sup>th</sup> interval with a V-I bass motion to Bb.

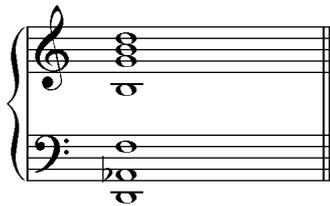


This first (“braying donkey”?!) theme is interrupted by a long-short gesture, which has its origin in ballet as a technique to demonstrate movement.



This chord has a Bb centre, and mostly spells Bb dominant 7. However there is a B natural “wrong” note, giving the chord a “crunch”. (This is not so much a flat-9 because of the placement in the voicing – low down in the trombone and bassoon.)

This long-short gesture chord is similar to the one that appears at the start chorale section (rehearsal 65, [6:25]), only now it is centred around G:

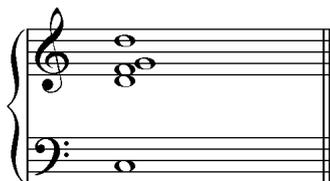


In this final chorale Stravinsky has given the following colour analogies:

- Trumpets – red
- Horns – blue
- Oboes – green
- Flutes – white

The chorale eventually resolves from E minor to his “white” key of C major, with unique note doublings and voicings {See the comparative analysis, below}.

The piece is filled with examples of diatonic chords and lines of differing centres interchanging and sometimes coexisting. An example of such a “pan-diatonic” chord is the following, which would have clearly been G7 had it not been for the bass note:



There are actually 26 distinct themes in the piece, which can be labeled neatly from A to Z!

### Comparative Analysis - Initial Observations

Note: The rehearsal numbers for the two editions differ. I will hereafter use the following identifiers: 1920-1 refers to rehearsal number 1 in the 1920 edition. 1947-1 refers to rehearsal number 1 in the 1947 edition.

I commenced by listening repeatedly to the two versions (hereafter referred to as 1920 and 1947), firstly passively and then actively with the scores. At first the differences seemed subtle, and more to do with recording technique and conducting style, but more and more my ears and taste became more acute. (I obtained other versions other than those listed to verify

whether what I was hearing was more technological, interpretational or compositional, including a recording by the Eastman Wind Ensemble.)

I began feeling that the 1920 is more aligned with the Stravinsky I know - the oppositions are more abrupt, the harmonies have more grit in the orchestration, and the tempos even felt livelier. By comparison, the 1947 felt more homogenized, more peaceful, refined and lighter in mood.

The implications are significant: Could it be that Stravinsky mellowed out and “tweaked” his composition to reflect his current mood in 1947? Is it possible Stravinsky strove to erase the effects of some of the dramatic Russian period that still leaked over into his personal style in 1920, when reorchestrating this piece in 1947?

Looking at the scores, the macroscopic differences are as follows:

- Meter/time signature. Stravinsky rebarred and remetered the composition, splitting 5/8 bars into their constituent 2+3 eighths in the introduction, for example. More significant is the type of change such as at 1920-4 and 1947-6. Replacing 3/4 with 2/4 and 4/4 with 3/4 changes the implied stresses within the phrases. This is clearly evidenced by the different phrase marks on the flute melody in this section. The recording reveals different breath placement.
- Editing phrases. I was surprised to discover that Stravinsky actually changed the phrases (despite being taught that the two versions are reorchestrations only and the notes are the same). A case in point is 1920-4 where the original flute melody is elongated by a bar in 1947-6. The 3/4 bar before 1947-8 is new!
- Section boundaries. There are not only more rehearsal numbers in the new edition (75 in 1947 as opposed to 45 in the 1920), but their placement differs. For example, 1920-7 occurs a bar later than the revised 1947-11. And 1947-14 occurs halfway through a bar in 1920-8. I think this is significant because a section marker implies compositional importance for that particular moment in the montage.
- The track times differed widely for the two recordings: The New York Philharmonic (1920) was 9:37; the London Sinfonietta (1947) was 8:46. My sensation of the latter being livelier seems to indicate faster overall tempi.
- Fermatas. The frequent use of conducted pauses (fermatas) in the 1920 version is sometimes replaced by rests. A case in point would be 1920-39 and 1947-65. The commencement of this very important finale (more on this later!) is with a rest in the revised version. In my opinion this is an improvement, as the conducted rest gives ensemble precision and momentum to the following chord. It seems Stravinsky also benefits from being able to determine the duration of the silence. The first example of this timed rest replacing a fermata is in 1947-1 versus 1920's bar before 1.
- Mistakes. The third bar of 1947-23 is a 3/8 bar with 4 eighth notes! The 1920 score reveals that the quarter rest should be an eighth. Beyond this kind of “silly” mistake, we have more illusive situation which exist between different

versions, as mentioned by Craft [Craft, 1992, p. 375-379]. I went through these and compared them to my scores, and, as I mentioned in my introduction, feel this is such a large area as being beyond the scope of this project.

- Instrumentation. The specific usage of instruments on a microscopic level amounts to the most interesting and insightful part of the study of this composition. On a more general level, it is worth noticing the change in the instrumental forces. Firstly, C trumpets were replaced by the more mellow sounding Bb trumpets in the 1947 edition. The third alto clarinet was replaced by the more homogenous choir of Bb clarinets in the 1947 edition. The 1920 version also calls for a doubling to the beautifully expressive A clarinet. The G alto flute was also replaced by the more homogenous choir of C flutes in the 1947 edition.

### **Comparative Analysis – Section by Section**

#### **Introduction**

The most striking element of the introductory bars of the 1920 is the strident clarinet melody, which is softened by the flutes in the 1947, even though they are just pointing the attacks of the flutes. It is also significant that the sustained pedal point, an element provided by the alto clarinets and so conspicuous in Stravinsky's music of this time, is removed in the 1947 version.

#### **1920-1 / 1947-1**

The characteristic long-short opposition at rehearsal number 1 is reorchestrated in 1947, adding the winds to the staccato attacks where they were in the brass alone in 1920.

Furthermore, the flutes and contrabassoon are added in 1947 (the contrabassoon is not used until rehearsal number 25 in 1920). The bassoons and horns are voiced lower in 1947, and the resulting chords sound more homogenous and even spectrally. The more even note distribution and less orchestral change within the phrase are characteristics I found throughout the work in the 1947 edition. [See manuscript.]

Three bars before rehearsal 2 we see a parallel movement of voices in 1920. These include oboes, english horn, 3 bassoons, and 4 horns. In 1947, tuba is added but horn 4 and bassoons are removed. Furthermore, the voices cross [See manuscript].

#### **1920-2 / 1947-3**

The first horn carries the melody, with 2 oboes accompanying. In 1947, the English horn takes the melody instead, with slight octave displacement. Though the English horn is more nasal and rough in this registration than the horn, the choir sound is more smooth and homogenous than in the 1920 where the solo horn is distinct.

#### **1920-6 / 1947-9**

At this return of the opening theme Stravinsky adds trumpet 1 in 1920. The 1947 is orchestrationally unchanged.

### **1920-9 / 1947-15**

The alto flute melody is taken by the soprano flute in 1947. The response is given by the Bb clarinet in 1947 (rather than the more shrill A clarinet in this register.)

### **1920-39 / 1947-65**

The so-called chorale section is the finale of the composition and was apparently the initially conceived portion, written directly with Debussy's memorial in mind [Craft, 1992, p.373]. This section is distinctly somber in mood - otherworldly even - and is so like all of the "apotheosis" conclusions to his other works from this time onward. ("Symphony of Psalms", 1930, "Three Pieces for String Quartet", 1914, etc.) Furthermore, once we arrive at the chorale section, as different as it seems, there is a feeling that it has influenced the preceding sections implicitly. It too, as we discover, contains stratification in opposing parts (static chant-like intonements versus choral melodies harmonized in block chords), but the entire section feels coherent and a fitting end to a memorial piece.

The first difference heard is the orchestration of the notes where the trumpet melody dips from D down to C and up to D again. In the 1920, this moment is defined by a changing texture given by the introduction of the french horns for 2 beats. This suspension over the melody's change is removed in the 1947, as the horns are only given the C note to color. Furthermore, the registral span is decreased in 1947 and the harmony altered. [See manuscript.]

The result is a horn section sound that is more unified in color and more subtle in its role, but has a certain internal tension. This is a pretty good summary, I would guess, of Stravinsky's overall aesthetic approach to the reworking of the entire piece.

In bars 7-9 (1920) / 1-3 (1947) of this section, we have the first melodic response to the static "chanting" chords. This response is melodically lead by the trumpet 1. My summary of the differences between the two editions is as follows:

- The contra bassoon leaps up a major 7th to C# at the end of the phrase in 1947, whereas this note is left out in 1920 but covered by a voice-lead tuba part.
- Trumpet 2 mimics trumpet 1 8vb in 1920, whereas in 1947 the second last note is changed to an E (from a C).
- Only one trombone plays in 1920, but in 1947 two trombones play, with trombone 2 taking trombone 1's line and trombone 3 taking the tuba's line from 1920.
- The tuba only colors alternate notes in 1947, whereas in 1920 it plays the full melody.

### **1920-40 / 1947-67**

Here is the next melodic response to the static "chanting" chords. This response is similar to the last, but in 1920 Stravinsky steps up the dynamic to forte. In 1947 the same restrained dynamic is maintained, and the notes are changed to make a slightly smoother sound with less beating. My summary of the differences between the two editions is as follows:

- The contra bassoon again leaps, this time an octave up in 1947. This time the 1920 continues the line in the same octave.
- Trumpet 3's have different notes in the fourth chord - F# in 1920, but this has been changed to F in 1947. The F# creates a lovely beat with the trombone 1's G!
- The same chord (4) is change in trumpet 2 also - D (1920) becomes F (1947).
- Again, only one trombone plays in 1920, but in 1947 trombone 3 takes the tuba line from 1920.
- The tuba in 1947 again only colors alternate notes, but this time the opposite ones to before!

### **1920-45 / 1947-75**

I was attracted to the sounds and differences of the last two chords of the composition. I notated a summary of the voicings [See manuscript.] The penultimate voicing is more compact within the choirs in 1947 (note especially the trumpets, horns, clarinets and bassoons.) There are also more doublings of the pitch A in the 1947 (9 versus 7 A's in the 1920). I also hear and see the nice semitone crunch between horn 3's C and the B of the trombone 1 and english horn in the 1920. This has been smoothed out in 1947.

The last chord has a different look and sound in the two versions [See manuscript]. The 1920 sounds warmer, and more balanced between the two tonal centers of G major and C major. The chord quality yielded is overall a C major 9 sound, with the B and D (major 7th and 9th degrees) ringing out truer in the 1920 than the 1947. In the 1947 there is some inter-choir beating between the horns and trumpets, given by the crunched B and C.

It is interesting that Stravinsky reversed the placement of this semitone crunch in the two editions - in the 1920 it happened in the penultimate chord and is then resolved to a sound more like the natural harmonic series for the final sonority.

### **Conclusion**

"Symphonies of Wind Instruments" is an excellent study of compositional style, and specifically of Stravinsky's Neo-Classic writing style. The two editions gave me a small insight into the mind of the composer, and some of the patterns and choices which the composer makes. Though I expressed an opinion of preference for the original edition, they stand together as equally strong and awesome compositions.

# Symphonies of Wind Instruments

Igor Stravinsky

The score is presented in four systems, each with a label in a box:

- System 1:** Labeled "1947 - 66". It shows a piano accompaniment in 2/4 time, with a key signature of one sharp (F#). The music consists of chords and single notes in both hands, with a fermata over the final measure.
- System 2:** Labeled "1920 - 39 bar 7". It shows the corresponding piano accompaniment from the 1920 version, which is identical to the 1947 version in this section.
- System 3:** Labeled "1947 - three before 2". The time signature changes to 4/4. The music features a series of chords with a fermata over the first measure, followed by a change in the bass line.
- System 4:** Labeled "1920 - three before 2". It shows the 1920 version of the same section, which is identical to the 1947 version.

Double bar lines with repeat slashes are used to indicate the end of each system.

1920 - 1  
Individual voice choirs

ob./  
eng.hn. cl. bsn. hn. tpt. tbn. tba.

1947 - 1  
Individual voice choirs

fl. ob./  
eng.hn. cl. bsn/  
contra hn. tpt. tbn. tba.

1920 - 39 bars 2-3  
Horns

1947 - 65 bar 2  
Horns

1920 - penultimate chord

fl. ob./  
eng.hn. cl. bsn/  
contra hn. tpt. tbn. tba.

1947- penultimate chord

fl. ob./  
eng.hn. cl. bsn/  
contra hn. tpt. tbn. tba.

1920 - last chord 3

1947- last chord

The image displays two musical staves, each representing a different version of a chord. The top staff is labeled '1920 - last chord' and the bottom staff is labeled '1947- last chord'. Both staves are written in treble and bass clefs. The top staff of each system contains notes for various instruments: fl., ob./eng.hn., cl., bsn/contr, hn., tpt., tbn., and tba. The bottom staff of each system contains notes for the same instruments. The 1947 version shows a more complex chord structure with additional notes in the bass line. A double bar line is present at the end of the 1947 staff, followed by a double slash indicating the end of the section.

## 12-tone Serial Period Techniques and Characteristics

*“Schoenberg creates rules to get notes; I know what notes I want and create rules to get them!”* (Stravinsky to Robert Craft)

On Friday July 13, 1951 Arnold Schoenberg died in Los Angeles, a couple of weeks after the premiere of “Moses and Aaron”. Stravinsky, his old neighbour, thought that his “method of composing with 12 tones related only to one another” wasn’t such a bad idea after all, and, spurred on by his colleague Robert Craft, experimented with serialism from the following year, until his own death in 1971. Cantata (1952) was the first example of 12-tone serialism in Stravinsky.

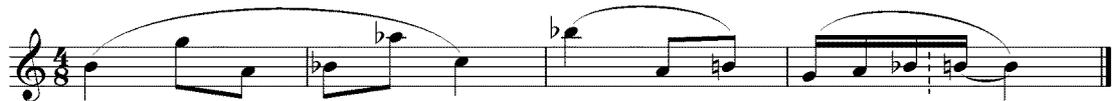
### THREE SONGS FROM SHAKESPEARE (1953)

Stravinsky received a commission for this work, for which he selected a unique ensemble – flute, viola, clarinet, and voice (either soprano or mezzo soprano.) Apparently Stravinsky began to listen to Webern’s 12-tone compositions, alongside music from the Renaissance, and he constructed rows and applied them in such a way that sometimes featured pitch centres and perfect-5<sup>th</sup> cadence points, as they do in this work.

The movements are titled “Musick to Heare”, “Ariel’s Song” (“Full Fathom Five”), and “When Daisies Pied”.

In Shakespeare’s sonnet “Musick to Heare” he praises music.

Stravinsky composed the following passage; analyse it:



Analysis reveals this passage contains:

- 12 attacks
- 6 unique notes
- Set type (0,1,2,3,4,5)
- First three notes are retrograded to create the next three notes, and use palindromic rhythm

The first four notes are used by Stravinsky to create the following collection of 24 notes, as played by the flute in the introduction:



Analysis of this collection of pitches reveals repeated inversion of the original series of ordered pitch intervals, both hexachordally and dodecachordally. Stravinsky features this certain combinatoriality in his composition. {See diagram over the page.}

The image shows three staves of musical notation for 'Ariel's Song'. The first staff is labeled 'A' and the second 'B'. The notation includes intervallic markings: -4, +2, +1, +4, -2, -1, and +2. The notes are primarily quarter and eighth notes, with some accidentals (flats and naturals).

“Ariel’s Song” features the bell-like sounds of which Stravinsky evidently had a fondness (featured also in the opening of Symphonies of Wind Instruments, the finale of The Wedding, etc). The frequent occurrence of perfects 4ths and 5ths, along with the *fp* attacks only exaggerate the bell-like effect. The song comes from Shakespeare’s famous “Full Fathom Five” (*The Tempest*). Its title is onomatopoeic, and Stravinsky’s bell-like interpretation of the poem is appropriate and masterful. (Vlad, p.181).

The image shows a single staff of musical notation in treble clef, representing a 6-note row. The notes are: G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), B4 (quarter), A4 (quarter). The notes are connected by a slur.

The 6-note row Stravinsky bases material in this movement upon is:

The image shows a single staff of musical notation in treble clef, representing the 6-note row. The notes are: G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), B4 (quarter), A4 (quarter). The notes are connected by a slur.

The third song “When Daisies Pied” features a serial motive based upon the aforementioned 6-note row of the second movement. This is revealed by the opening theme in the voice:

The image shows a single staff of musical notation in 4/8 time signature. The notes are: G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), B4 (quarter), A4 (quarter). The notes are connected by a slur.

In summary, Stravinsky’s Three Songs from Shakespeare play with 12-tone language in such a way that features pitch centres – temporary “home” notes – and serial ordering of pitch class sets (often of 4, 6 or 8 notes).

**Task:** Listen to CD and read the score.

## MOVEMENTS FOR PIANO AND ORCHESTRA (1959)

Stravinsky wrote that he discovered serial combinations that were new to him in this work, and that he found himself becoming “*not less but more and more of a serial composer*” (Stravinsky & Craft, 1960, p.106). He also said that he considered this composition the most structurally advanced to date, full of “polyrhythmic combinations” and “unique combinatorial properties” of tone rows. (Ibid, p.106-107) The composition is in five movements, each with specific and differing tempi, with bridging passages between. The changeability and complexity of timbre, rhythm, and pitch indicate a serial process behind the composition of quite an advanced order.

**Listen** to CD “Movements for Piano and Orchestra”.

The following 12-tone series is used, sub-grouped into four trichords. This series was employed in multiple works from the mid-1950’s onwards (Vlad, p.262).



**Task:** Analyse the intervals, name the trichords, and name the row as a series of pitch integers.

## Bibliography/Discography

- Cone, Edward. Stravinsky – The Progress of a Method. Perspectives of New Music, Vol.1 No.1.
- Craft, Robert. Stravinsky: Glimpses of a Life. St. Martin's Press, 1992.
- Grout, Donald Jay. A History of Western Music (4th edition). W.W. Norton & Co, 1988.
- Heiss, John. Some thoughts on Stravinsky. NEC Alumni Bulletin, 1971.
- Stravinsky. Three Pieces for String Quartet. Alban Berg Quartet (CD). [CD 785.7194 ALB]
- Stravinsky. The Firebird (DVD). The Royal Ballet, Orchestra of the Royal Opera House, conducted by John Carewe. [VC 792.845 FIR]
- Stravinsky. Le sacre du printemps; L'Oiseau de feu (CD). London Symphony Orchestra. [CD 784.21556 STR]
- Stravinsky. Le sacre du printemps (score – 1947 revision). [MU 784.21556 STR]
- Stravinsky. The Firebird (score – original 1910 version). [MU 781.556 STR]
- Stravinsky. Petrouchka (score –1947 revision). [MU 784.21556 STR]
- Stravinsky. Petrouchka. [CD 784.21556 STR]
- Abbott, Graham. Stravinsky's Petrouchka. Keys to Music, ABC Classic FM. Broadcast 14/6/2008.
- Stravinsky & Craft. Conversations with Igor Stravinsky. Faber & Faber, 1959.
- Stravinsky & Craft. Memories and Commentaries. Doubleday, 1960. [780.924 STR:M]
- Stravinsky & Craft. Dialogues and a Diary. Doubleday, 1963.
- Stravinsky & Craft. Expositions and Developments. Doubleday, 1962.
- Stravinsky & Craft. Themes and Episodes. Random House, 1966.
- Stravinsky & Craft. A Quintet of Dialogues. Perspectives of New Music, Vol.1 No.1.
- Stravinsky, Knopf & Craft. Retrospectives and Conclusions. Random House, 1966.
- Vlad, Roman. Stravinsky (3<sup>rd</sup> Edition). Oxford University Press, 1978. [780.924 STR:V]