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The Problem of Articulation in Stravinsky's Music

In his published reviews and conversations Stravinsky many times stressed the importance of adequate sound articulation in his music.

The stylistic performance problem in my music is one of articulation and rhythmic diction. Nuance depends on these. Articulation is mainly separation, and I can give no better example of what I mean by it than to reader to W. B. Yeats's recording of three of his poems. Yeats pauses at the end of each line, he dwells a precise time on and in between each word – one could as easily notate his verses in musical rhythm as scan them in poetic metres¹.

By the word of 'articulation' he understood mainly the effect of separating successive pitches and their timbre as well as the effect of grouping them within bigger formal units. Therefore, articulation in Stravinsky's music is connected with the timbre of single pitch, and with the partition of musical time on hierarchically differentiated formal units.

In his scores the composer does not propose new articulation signs for new types of timbre. In notation, these various timbres,

¹ *Stravinsky in Conversations with Robert Craft*, Harmondsworth, Middlesex: Penguin Books Ltd, 1962, p. 132.

connected with the effect of short sound, are suggested for performers by the superposition of traditional signs of articulation, different rhythmic values with (or without) rest, and sometimes by additional verbal information that this note ought to be really short and separated from the following one (e. g. *très court, accentue et assez court, très serré*). Stravinsky was convinced that graphic signs in his scores are not the symbols of imagined sonorities and they do not give full information on the new sonority proposed by him. So he regarded his recordings as indispensable supplements to the printed music.

[...] stylistic questions in my music are not conclusively indicated by the notation; my style requires interpretation. This is true and it is also why I regard my recordings as indispensable supplements to the printed music. But that isn't the kind of 'interpretation' by critics mean. What they would like to know is whether the bass clarinet repeated notes at the end of the first movement of my *Symphony in Three Movements* might be interpreted as 'laughter'; what difference could this make to the performer? Notes are still intangible. They are not symbols but signs².

In Stravinsky's music the articulation of pitches is a result of his searching for a new sonority and a new mean of hierarchical division of musical time. It is rooted in his conception of composition as the construction of sounds in time. Therefore, the analysis of articulation is especially important for the adequate theoretical interpretation of Stravinsky's compositional method as well as for the stylistic performance of his music.

In this article I will focus on three aspects of articulation in Stravinsky's music: (1) on the timbre effect as a result of simultaneous *legato-staccato* of the same pitch (or doubled in octave); (2) on the articulation of short sounds repeated as 'pulsation'; and (3) on some means of articulating a hierarchically bigger formal units based on a repeated sound.

1. The simultaneous *legato-staccato* articulation of the same pitch

A specific kind of pitch articulation as a simultaneous *legato-staccato* is especially characteristic for Stravinsky's music.

² *Stravinsky in Conversations with Robert Craft*, op. cit., p. 132.

There are two types: (1) *legato-staccato* on the same pitch and (2) *legato-staccato* on different pitches usually played at various registers.

The refined effect of timbre as simultaneous *legato-staccato* on the same pitch was 'invented' by Stravinsky in the twenties and used by him almost to the end of his compositional career. Gardner Read linked this effect with the new scoring for wind in Stravinsky's neoclassical works. He wrote, that:

In his wind scoring Stravinsky abrogated the standard color devices of the Impressionists and Expressionists – flutter tonguing, glissandos, raised bells, and the like – in favor of a technique of distinctive articulation new in the history of instrumentation. Briefly stated, this is the doubling of similar instruments using opposing types of articulation. For example, two flutes will be joined in unison on a melodic passage; the first flute will play even, legato notes, while the second flute will produce the same pitches staccato, or doubled-tongued, or with cross-accenting, or interspersed with rests³.

In Stravinsky's scores, written in the course almost forty years, one can notice various examples of the articulation of the same pitch as simultaneously *legato* and *staccato*. The composer used this kind of articulation mainly in the melodic line but sometimes the unison played as *legato* and *staccato* is also connected with the moderating motion of pitches based on a repeated figure or with a rapid succession of sounds.

In Stravinsky's music one can differentiate three types of scoring. In the first type the simultaneous *legato-staccato* of the pitches 'joined in unison' is played by the same instruments, e. g. by two oboes or two bassoons. For example in *Symphony of Psalms* (1930) the composer superimposes the oboe's and bassoon's pitches articulated *legato* with the same oboe's and bassoon's pitches executed *staccato* by other instrumentalists (I, nos. 4–5). In *Persefone* (1934) he joins in this way pitches played by two flutes (no. 131) and in *Canticum sacrum* (1955) – by two oboes. Pitches played by oboes as *legato-staccato* are doubled at two octaves by a trombone *portamento* (Example 1). He also used this kind of articulation at piano works; in *Sonata for two pianos* (1944), the pianist has to play a succession of pitches (doubled in octave) as *legato-staccato* (Variation 3).

³ Gardner READ, *Style and Orchestration*, New York-Schirmer Books, 1979, p. 181.

In the second type of scoring the simultaneous *legato-staccato* articulation is performed by two different instruments belonging to the same group, e. g. strings or wind. One can see the unisono *legato-staccato* played by various strings: viola and cello for example in *Concertino* (1920) for string quartet (no. 17), and executed by various woodwinds: flute and clarinet – in *Octet* (1923) for wind instruments (no. 26). In the score of *Canticum sacrum* Stravinsky 'joins in unison' the organ's pitches articulated *legato* with the same pitches on the bassoon played *staccato* (bars 136–41). In the third type of scoring the simultaneous *legato-staccato* articulation is played by two instruments belonging to different groups of instruments. For example in *Septet* (1953) the composer super in posed the bassoon's pitches articulated *marcato* with the cello's *pizzicato* (I, no. 6).

This kind of articulation was used also by others composers. One can see it, for example, in Witold Lutoslawski's *Concerto for piano and orchestra* (1988); here (nos. 85–86) the theme of passacaglia is played simultaneously by two bassoons *staccato* as semiquavers with rest and by violins and double-basses as repeated semiquavers (non *staccato*) (Example 2).

2. The articulation of sounds repeated as 'pulsation'

The second type of simultaneous *legato - staccato* articulation – that of different pitches usually played at various register – is also very characteristic for Stravinsky's music. It support the contrast between two 'musical actions' in the texture connected with the idea of 'melody with accompaniment'. In Stravinsky's works, the melody articulated *legato* is usually accompanied by the *staccato*-effect, e. g. by 'pulsation' of separated sounds performed as the various combination of *staccato*, *spiccato*, *pizzicato*, *marcato*, and noted as the repeated rhythmic value with (or without) the rest. This different kind of the timbre-pulsation (sometimes called *ostinato*) is at the core of Stravinsky's conception of music. In his published sketches of *The Rite of Spring* the composer wrote: Music exists when there is rhythm, as life exists when there is a pulse⁴. Therefore, a regular

⁴ Igor STRAVINSKY, *The Rite of Spring. Sketches 1911–13, (Facsimile Reproductions from the Autographs)*, London – Boosey and Hawkes, 1969, p. 36 (Appendix I, p. 12).

motion of sounds, grouped in various ways for formal units, is – according to him – like a pulse in a biological organism.

The timbre of a pulse-sound is usually a mix of few instrumental colors and various articulations of the same or few different pitches. In the score this effect is noted as a sophisticated combination of many types of the sign-articulations and as a superposition of the various rhythmic values.

Generally one can differentiate two types of pulsation-accompaniment: the composer repeats (1) only one kind of timbre-pulse (as a, a, a, ...), or (2) two kinds of sonorities (a, b) in various ways.

As an example of the first type of timbre-pulse succession (e.g. a, a, a, a...) we may take a fragment of *Mavra* (1922) (no. 144 of the score), where the same sound is repeated in rather slow motion (one sound-pulse takes about 2/3 second, crotchet = 80). It is notated as two rhythmic values: crotchet and quaver (with the rest) 

and linked with a various signs of articulation: *pizzicato*, *staccato*, *spiccato*, *sforzato*, *arpeggio*, *grace* notes. This kind of the timbre is performed by woodwinds (two clarinets – *spiccato*, two bassoons – *staccato*, ones of them with *grace* note), strings (cellos – chord *arpeggio*, double-basses – one note *pizzicato*), and percussion (timpani – *staccato* with two *grace* notes). All instruments repeat a euphonic chord in the low register: $F-B\flat-e\flat-g\flat$ and have to play it *sforzato* with a *piano* dynamic. That instrumental accompaniment is connected with the expressive melodic phrase sung by the tenor (Cook – *Mavra*), the hero of this *opera buffa*. (Example 3).

In Stravinsky's music the second type of pulsation-accompaniment, e. g. the repetition of the two sonorities (a, b), is associated with an impression of various, usually moderate or fast motions and with the different models of their succession. The following examples will illustrate a repetition of the two various timbre-pulses in succession according to the three schemes: (1) ab ab ab... . ; (2) $aa_1bb_1 aa_1bb_1 \dots$; and (3) $abba_1 abba_1 \dots$.

The first scheme one can see in the score of opera *Mavra* (fragment no. 12) where the melody sung by the soprano (Parasha) is accompanied by two sonorities in a moderate motion. In sum there are eleven pulses; each takes 1/4 second. In the score the first type of timbre-pulse (a) is noted as a quaver, the second one

(b) – as a super in position of quaver and semiquaver with rest (in the tempo crochet = 120).



Stravinsky contrasts these two timbre-pulses with others by the different register and the articulation of the pitches played by strings *staccato* or *pizzicato*. The first one (“a”) is a result of the performance on low strings (cellos and double-basses) of a single pitch (doubled in octave) articulated *staccato*. This kind of the timbre is repeated as a succession of the pitches: *c*#, *d*, *e*, *f*#, *g*, *g*#.

The second timbre-pulse (“b”) is a color-mixture of higher strings (violins and violas) and brass (trumpet); they repeat two slightly differentiated chords (*b-f#¹-a¹* or *b-g¹-a¹*) articulated *pizzicato* (strings) and *staccato* (trumpet). The composer was interested in subtle nuances of articulation; he wanted each group of higher strings (violins, violas) to play simultaneously two pitches *pizzicato* and instructed, that the instrumentalists have to articulate the interval really together, *non arpeggio de 2 doigts*. (Example 4).

As an example of the fast ‘pulsation’ of two sonorities based on the scheme: *a a₁ b b₁* we may take another fragment of *Mavra* (nos. 6–9); here a lyrical melody sung by tenor (Husar) is accompanied by 64 repetitions of the ‘separated sounds’ (one sound-pulse takes about 1/8 second⁵). The first timbre-pulse (“a”) is played by low strings (cellos, double-basses) and woodwinds (2 clarinets, 2 bassoons); it is contrasted with the second one (“b”), which is performed by higher strings (2 violins, viola) and brass (3 trumpets). Both are repeated in a slightly ‘weaker’ version: “a₁” is played only by woodwinds without the accent and *staccato*, (*non spiccato*), and “b₁” – only by strings (*non staccato*).

These two timbre-pulses are also contrasted by register; “a” sounds in the lower and “b” in the higher register. At the beginning of this fragment (in the first two bars), both timbre-pulses sounds as the chord B-minor, but lower strings and woodwinds play this chord as *B-D-F#-B-d-f#*, and higher strings and brass – as the trichord *h-d¹-f#¹*. Later these chords are differentiated; the timbre-pulse “a” is based on the pitches *B-D-F#-Bb-d-g* and the timbre-pulse “b” – on *a#-c#¹-e¹*.

⁵ In the score it is notated as semiquaver in the tempo crochet = 120

The Problem of Articulation in Stravinsky's Music

♩ = 72

Oboes 1 2

Trombone

poco sf *sempre sim.*

sempre poco mar.

non f *sim.*

Example 1. Igor Stravinsky, *Canticum sacrum*, bar 154-61

85

fig. 2

cb.

p

mf

p *mf*

Example 2. Witold Lutoslawski, *Concerto for piano and orchestra*, nos. 85-86

Cook

Cl. in La 1 2

Fig. 2 1 2

Timp.

Vc.

Cb.

Дре - - - - - мо - той

sf sempre

sf sempre

sf sempre

pp

pizz. sempre poco sf

sempre poco sf

Example 3. Igor Stravinsky, *Mavra*, no. 144

12 PARASHA
 у — нѣ — сень веѣхъ сло — ва о — дни Ска-жи — те
 (pizz.) (pizz.) (pizz.) (pizz.)
 Vlno. I non arpeg. de 2 doigts (pizz.) mf arco
 Vlno. II non arpeg. de 2 doigts (pizz.) mf arco
 Vla. non arpeg. de 2 doigts (pizz.) mf arco
 Cor. in Fa 1 mf
 2
 Tr. in La 1
 2
 Vc., Cb. arco pp staccatiss. poco sf e meno subito

Example 4. Igor Stravinsky, *Mavra*, no. 12

In the score these two different kinds of timbre (“a”“b”) are joined with the superimposition of two rhythmic values (quaver and semiquaver), with various signs of articulation and additional verbal information (see Table 1 and Example 5).

Table 1

- a  Vc- *pizzicato*, Cb- *spiccato*, *excessivement court*
 1 Fg *spiccato* with accent,
 and 2 Cl, 1 Fg *spiccato* with accent, *sfz*, *très serré*;
 in sum all instruments play chord $\underline{B-D-F\#}-B-d-f\#$ (4 times)
 and later $\underline{B-D-F\#}-B\flat-d-g$ (12 times)
- a₁  only 2 Cl, 1 Fg *staccato* (but without accent)
 in sum they play chord $B-d-f\#$ (16 times)
- b  2 trumpets *staccato*
 and violins and violas *du talon*, *spiccato* with accent, *sf*
- b₁  only violins and violas *du talon* (but non *spiccato* and without accent);
 in “b” and “b¹” all instruments play in sum the chord $b-d^1-f\#\overset{1}{1}$
 (8 times)
 and later $a\#\overset{1}{1}-c\#\overset{1}{1}-e\overset{1}{1}$ (24 times)



The Problem of Articulation in Stravinsky's Music

6 Più mosso (♩ = 120)

HUSAR

Ко - ло - ко - - - - - ЛЫИ - КИ ЗВс-

Example 5. Igor Stravinsky, *Mavra*, no. 6

The third model of pulsation-accompaniment is composed from the two timbre-pulses (a, b) and the 'weaker' version of the first one (a₁), e. g. a b b a₁ a b b a₁ ... one can see at no. 75 of the score of *Mavra*. This fragment give an impression of the moderate motion; each timbre-pulse – noted as quaver (in tempo half-note = 80) – takes about 1/5 of second.

The timbre-color of the first one (a) is a result of only one pitch played by low strings (cellos and double-basses) *staccato* at a *p* dynamic; the timbre-color of the second one (b) is connected with the higher register and with the interval of a third executed by brass (1 trumpet, 2 trombones) also *staccato* and at a *pp* dynamic. Stravinsky varied the timbre of the first pulse by using different bowing: the timbre-pulse named "a" is a down bowing down and "a₁" – an up bow (Example 6).

brass γ $\overset{\cdot}{\square}$ γ

strings $\overset{\cdot}{\square}$ γ $\overset{\cdot}{\square}$ γ

a b b a₁

PARASHA 76
Я ду - ма - ю по -

NEIGHBOUR
Раз - го - ворь ве - дётъ сво - бод - но.

Tr. in La 1
pp

Trbn. tenor 1
pp

Trbn. tenor 2
pp sempre stacc. e pp

Cb.
arco V
sempre p e staccato

Example 6. Igor Stravinsky, *Mavra*, no. 75

3. The articulation of hierarchically bigger formal units based on repeated sounds

In Stravinsky's music the articulation of hierarchically bigger formal units based on repeated sounds, is connected first of all with the repetition of two or three bars with different meter and secondly with the repetition of a linear intervallic structure as an *ostinato* figure. To illustrate Stravinsky's method of construction and the modification of hierarchically bigger formal units (which I call respectively segment and section) I will focus on two examples from the opera *Mavra*.

At the first fragment (nos. 37–40), the vocal melodic line – sung by the contralto (Mother of Parasha) and doubled by higher strings (2 violins, viola) – is accompanied by two different timbre-pulses repeated 27 times according to scheme: a b a b This sound-repetition gives an impression of a rather slow motion (each pulse takes about 1/2 second; it is noted as quavers in tempo quaver = 132). Two timbre-pulses are contrasted by register, by instrument and by the articulation of pitches. The first timbre-pulse ("a") is played at a low register as one note *staccato* (doubled in

octave: F–f) by low strings (cellos, double-basses) and winds (2 bassoons, 1 horn). The second one (“b”) – as chord ($e^2-g^2-c^3$ or $f^2-a^2-c^3$) is played at a higher register only by winds (3 horns *staccato*, 2 clarinets *non staccato* and 1 clarinet piccolo with accent).

The two bigger formal units, e. g. segments (A, B), are a result of the regular repetition of two different bars grouped as $3/8 + 4/8$ (A) or $4/8 + 3/8$ (B). These segments are repeated in two versions as A or A_1 and B or B_1 , because the metric accent is at one time on the timbre-pulse “a” and at another time on “b”.

This fragment is divided into two, hierarchically largest formal units, e. g. the sections X (no. 37) and Y (nos. 38–39).

Therefore, each hierarchically higher formal level (I–IV) is a montage of the two (slightly contrasted) units from the lower formal level.

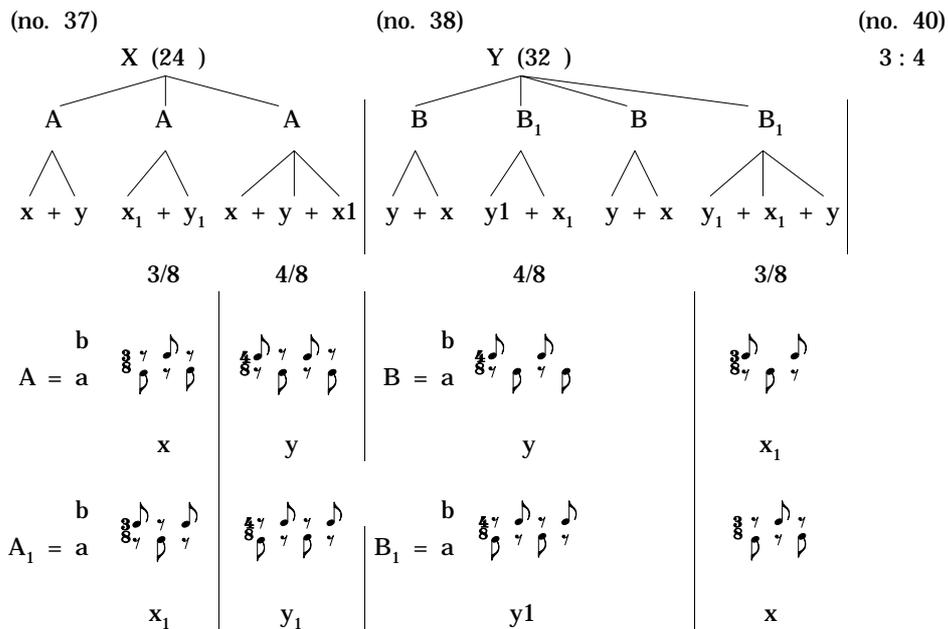
- I. The two timbre-pulses (quavers) with the metric accent, as “a”, “b” or without the metric accent as “ a_1 ”, “ b_1 ”;
- II. The two bars x (3♩), y (4♩); the proportion of its duration is 3 : 4. There are two versions of these two bars:
as $x = a + b_1 + a_1$ or $x_1 = b + a_1 + b_1$;
and $y = b + a_1 + b + a_1$ or $y_1 = a + b_1 + a + b_1$
- III. The two segments A (7♩), B (7♩) in two versions,
as $A = (x + y)$ and $A_1 = (x_1 + y_1)$
 $B = (y + x_1)$ and $B_1 = (y_1 + x)$
- IV. The two sections X (24♩), Y (32♩); the proportion of its duration is 3 : 4.

The montage of the two units is connected with parallel (ab ab ..) or symmetrical relations (aba). But Stravinsky mixes these two general structures of montage to give an impression of ‘broken parallel’ or ‘broken symmetry’.

At the segments A and B the montage of bars is usually parallel (as xy xy.. or yx, yx), but at the end of the sections it is symmetrical (as xyx, or yxy). There is the same effect of ‘broken parallel’ or ‘broken symmetry’ at the highest formal level formed by montage of the sections X and Y. The first section (X) is a symmetrical montage of segment A (as A A_1 A), and the second one (Y) – a parallel succession of segment B (as B B_1 B B_1).

The ‘portions’ of musical time, e. g. the duration of units is a little differentiated and connected with the proportion 3: 4 (between two bars x: y as well as segments X : Y). The articulation of the hierarchically differentiated formal sections is as follow (Table 2).

Table 2.



As an example of Stravinsky's other method of articulating musical time for hierarchically differentiated units, we may take nos. 1–6 of opera *Mavra*. It is the famous aria of Parasha (soprano) where the vocal melody, connected with a tradition of Italian *bel canto* and Russian romance, is accompanied by the instrumental 'pulsation of separate sounds' that is so characteristic of Stravinsky.

At the lowest formal level there is regular exchange of two timbre-sounds (a b) which give an impression of rather slow motion; the length of one timbre-pulse – noted as a quaver – is about 1/2 second⁶.

The first timbre-pulse (a) is a result of only one pitch played in low register *staccatissimo* by strings (cellos, double-basses) and brass (1 horn, tuba) at *piano* dynamic level. The second one (b), as a trichord (in two variants related one to another as dominant to tonic), is performed at a higher register by brass (3 horns) in normal articulation (e. g. the composer does not suggest the articulation *staccato*). So as usual, the contrast between the

⁶ In the score the tempo is noted as crotchet = 69.

timbre-pulses “a” and “b” is a result of different registers, instrumentation and articulation. The succession of “a b” sounds, which form the background formal level, is repeated 105 times (so it takes about 1,5 minute).

Segments A, B and C, as the next hierarchically formal units, are a result of the repetition of three different linear intervallic structures (as ostinato figures) formed by the timbre-pulse “a”. In segment A the ostinato figure is based on the chord B minor, in segment B – on G minor, and segment C – on D minor⁷. The duration of these segments is related to the proportion 4 : 7 : 3, because the ostinato figures in segment A are composed from four pitches (B \flat –F–D \flat –F), in segment B from seven (B \flat –G–D–G–B \flat –G–D) and in segment C – from three (A–F–D).

The four biggest formal units – sections X, Y, Z, X₁ – are the result of the repetition of these three lower formal units. The cadences in the melodic line stress this division of the pulsation-accompaniments for the biggest formal units. Also the repetition of the first ostinato-figure (A) is connected with the repetition of the same melody.

The duration of each section is different; it depends on the number of ‘ostinato figure’ repetitions. At the first section (X) the figure named A is repeated 7 times⁸, at the second one (Y) – the unit B appeared twice, at the next one (Z) the ostinato-figure named C is executed 5 times, and at the last section (X₁) the first intervallic structure is repeated 12 times. Therefore, the duration of the sections, which form the sequence X Y Z X₁, is related to the proportion 2 : 1 : 1 : 3 (28 : 14 : 15 : 48)⁹.

Within each section Stravinsky repeats the same ‘portion of time’ connected with the ostinato-figures, but he modifies them by changing the metric accent. One time it is connected with the timbre-pulse “a” and another time with “b”, as is shown in the scheme:

⁷ At the segment A the timbre-pulse “b” is connected with two chords: B minor and F7 major, at segment B – with G⁷ major and C minor, and in segment C – with A⁷ major and D minor.

⁸ The first pitch (B \flat) is played by Tb and Vc and doubled in octave by Cr and Cb.

⁹ (nos. 1–2) X – 7 times A – 4 times “ab” = 28 crotchet (2)
(no. 3) Y – 2 times B – 7 times “ab” = 14 crotchet (1)
(no. 4) Z – 5 times C – 3 times “ab” = 15 crotchet (1)
(nos. 5–6) X₁ – 12 times A – 4 times “ab” = 48 crotchet (3)

The scheme of section Z

3	3	3	3	3	3	bars
4	4	8	4	4	8	
b	b	b	b	b	b	b
a	a	a	a	a	a	a

timbre-pulses
ostinato figure C

Therefore, each section is divided at once regularly (by the ostinato-figures of “a”), and proportionally (by the metric accent)¹⁰.

Throughout the first section of the song (X), there are three ‘planes’; the bass (“a”) maintains a steady four-beat pattern, but the tonic-dominant off-beat chord sequence in the horns (“b”) follows an independent pattern, basically of six beats (as D⁷ T T D⁷ T D⁷) which leads to systematic confusion between the functions of rhythm and harmony. These two ‘planes’ Stravinsky averages out into a regular alternation (from the point of the vocal entry) of 3/4 and 5/8 bars, which fits none of them and so implicitly introduces a fourth. Meanwhile Parasha sings a metrically free folk tune across both accompanying schemes.

The scheme of section X

3	3	5	3	5	3	5	3	5
4	4	8	4	8	4	8	4	8
b	b	b	b	b	b	b	b	b
a	a	a	a	a	a	a	a	a

Stravinsky’s musical style depends not so much on pitch organization as on the refined nuances of timbre-sound and its articulation. This is why his scores although looked so simple, are

¹⁰ The succession of the bars noted in the score is as follow:

X – 4/4; 3/4, 5/8; 3/4, 5/8; 3/4, 5/8; 3/4, 5/8;

Y – 3/4, 2/3, 3/4, 2/4, 3/4;

Z – 3/4, 3/4, 3/8; 3/4, 3/4, 3/8;

X₁ – 2/4, 3/4, 3/8, 2/4, 3/4, 5/8, 6/8,

3/4, 3/4, 3/4, 5/8, 3/4, 5/8, 3/4, 5/8, 3/4, 5/8

So the composer changes the length of the bars according to the proportion 1 : 2, 2 : 3, 3 : 4, and 5 : 6.

X – 8 : 6 : 5 : 6 : 5 : 6 : 5 : 6 : 5

Y – 3 : 2 : 3 : 2 : 3

Z – 2 : 2 : 1 : 2 : 2 : 1

X₁ – 4 : 6 : 3 : 4 : 6 : 5 : 6 : 6 : 6 : 6 : 5 : 6 : 5 : 6 : 5 : 6 : 5

in reality so difficult for the performers. The composer complained that:

For fifty years I have endeavoured to teach musicians to play  instead of  in certain cases, depending on the style. I have also laboured to teach them to accent syncopated notes and to phrase before them in order to do so¹¹.

I hope that this article present some principles of Stravinsky's method of the articulation and composition that will be useful for the performers as well as for the theorists of twentieth-century music.

¹¹ *Stravinsky in Conversations with Robert Craft*, op. cit., p. 133.