

## Interaction of Orchestral Groups in Vytautas Barkauskas' Symphonic Music

V. Barkauskas' has a considerable experience in the field of orchestral music – he has written 62 orchestral works. It includes various orchestral formations and various genres: 24 works for large symphony orchestra; 30 cases feature smaller collectives (or ensembles up to 32 musicians) mainly recording music for theatre and film; 2 works for sympho-jazz orchestra; 6 works for string orchestra.

In his symphonic music totalling 6 symphonies and 8 smaller-scale symphonic works the composer employs double, triple and quadruple symphony orchestra. However, he gives preference to a triple orchestra. When using traditional orchestra the composer plays with its variability, which is achieved by adding instruments or modifying the performer numbers in separate instrumental groups. Ex. double orchestra, but three flutes in *Three Aspects*, Op. 17 (fl.picc. muta in III fl.), triple woodwind group and quadruple brass group in the Third Symphony, Op. 55, quadruple brass and mixed woodwind groups (4 fls., 3 obs., 4 cls., 3 bns.) in the Fifth Symphony, Op. 81. Knowing Barkauskas' interest in avant-garde experiments and his constant search for new expression means in his own music language, his restriction to traditional orchestra could seem surprising. However, on the one hand the composer was never fascinated with 'experiment for its own sake', and holds the opinion that the resources of a traditional orchestra are rich enough and are far from having been exhausted. On the other hand, the composer often had to take into consideration the actual possibilities of a performance.

Majority of Barkauskas' orchestral works were written with a first performer in mind, namely the Lithuanian National Symphony Orchestra<sup>1</sup>. Prof. Juozas Domarkas, current artistic director and chief conductor, recalls his first steps with the orchestra: "In 1964, the orchestra consisted of 65–70 musicians – still far from being full orchestra. For several decades there was no percussion class at the Conservatoire. The orchestra saw such a range of 'beaters'! We had many problems to solve: beside the recruitment of the orchestra, we had to work on precise intonation, tuning, sound balance and technical ability. In a very short time we achieved more than we could expect."<sup>2</sup> This period coincided with the beginning of Barkauskas' creative career. The orchestra's ability and artistic proficiency was growing, as was Barkauskas' skill of orchestral writing. One could detect richer and more inventive use of orchestral groups.

Barkauskas started using larger percussion group: from four performers (2 Symph., 3 Symph., 4 Symph.) to six in the Fifth Symphony and eight in the symphonic sketch *The Sun*, Op. 69. His scores feature over 40 different percussion instruments, while one of his works employs 16 – 20 aforementioned instruments. Timpani, tam-tam, tom-tom, gran cassa, campane, piatto sospeso, campanelli and triangolo can be found in all symphonic opuses. The composer often uses xylophone, vibraphone, marimbaphone, tamburo, claves and temple blocks, while frusta, flexaton and crotales appear just episodically. Water-gong (3 Symph.), guiro (4 Symph.), roto-tom and gong Javanese (6 Symph.) are used just once. *Duo Concertante* for violin, viola and orchestra, Op. 122 is a separate case. Here the composer employs different percussion instruments including tube di bamboo and glass wind chimes to project the Japanese flavour.<sup>3</sup>

The role of percussion instruments in Barkauskas' orchestral music is rich and manifold; these instruments serve as an important element in terms of phonism and compositional dramaturgy.

The percussion instruments are not only differentiated in terms of timbre, register and function, but also in addition to traditional four instrument groups form a separate so-called colourist group, which includes such instruments as campanelli, xylophone, vibraphone, and sometimes even triangolo, temple block or cow-bell. This group is given an important role in the 2<sup>nd</sup> movement of the Second Symphony, contributing an additional glow to the woodwind trills. Yet different colourist instrument combinations are displayed in the 3<sup>rd</sup> movement of the Fourth Symphony, while in the 2<sup>nd</sup> movement of the Sixth Symphony together with solo violin they create an image of quivering and pulsating space.

<sup>1</sup> The Lithuanian National Symphony Orchestra was established in 1940.

<sup>2</sup> Nejubiliejinis interviu (interview with musicologist R. Gaidamavičiūtė). Gaidamavičiūtė R. *Kūrybinių stilių pėdsakais*. Vilnius, 2005, p. 320–321.

<sup>3</sup> The concerto is dedicated to Japanese ambassador Chiune Sugihara and his wife Yukiko, both of whom resided in Lithuania in 1940.

Barkauskas uses all four main woodwind groups with different additional instruments: alto and piccolo flutes, English horn and oboe d'amour, bass clarinet and contrabassoon (invariably, clarinet in B, with the exception of *The Sun* where the composer uses clarinet in A).

His brass group features traditional instruments: French horn in F, trumpets in B, trombones and tuba.

The use of string instruments reflects the novelties of the 20<sup>th</sup>-century avant-garde technique: sonoristic expression means, micro-intervals as well as unconventional means of sound production. This can be found in works written in the 60–70s, i.e. in the Second and the Third symphonies, *Three Aspects*, where the composer indicated the desirable number of string instruments: ex. not less than 12, 10, 8, 8, 6. The composer uses the maximal divisi for the clusters of wide diapason as well as wide and transparent sonoristic moving layers. Wide divisi is rarely encountered in his later works, but in those few cases it has a functional role, ex. light breathing of boundless space or a background of an ephemeral multilayered texture (*The Sun* – from the beginning to c.7).

In addition to instruments comprising traditional orchestral groups, Barkauskas uses piano, harp, celesta, organ and harpsichord. The piano, harp and celesta are employed in almost every of his symphonic compositions.<sup>4</sup>

Fond of the piano and well familiar with piano technique, the composer retains from a typical piano texture and approaches this instrument as an orchestral tool. The piano is given many different functions: supporting, organising a rhythmic foundation, accenting or colouristic. Admittedly, Barkauskas' piano could be chameleonic in the orchestra – when given accented or cluster texture it adapts to percussion (2 Symph. 4<sup>th</sup> mvt.; 5 Symph. 2<sup>nd</sup> mvt.; c.11); it simulates the trombone by repeating the trombone motive and its rhythmic pattern in a low register *ff* (3 Symph., c 57–58); it sounds bell-like where the composer indicates *quasi C-ne* (3 Symph., c. 67) or flute-like (6 Symph., 1<sup>st</sup> mvt., c. 16).

The harpsichord is employed more as a timbral instrumental without a historical association with the baroque epoch. Somewhat dry and without resonance sound of harpsichord is featured in the ensembles involving similar timbres such as harp, celesta and strings. Dispersion of tension (5 Symph., 4<sup>th</sup> mvt.), an image of sun rays penetrating the 'mist' of strings (scale passages in *The Sun*), a projection of sad (*doloroso*) mood when the low register and untypical chordal texture is used (Concerto for flute and oboe, Op. 50); a state of isolation, indifference and resignation (ascending melodic fifths interrupted by rests in 5 Symph. and Viola Concerto).

Such is the role of the harpsichord in Barkauskas' symphonic music. The harpsichord is given an important function in Viola Concerto, Op 63. Here the piano is teamed-up with the orchestra, while the harpsichord partners the soloist. In the opening of the 3<sup>rd</sup> movement the harpsichord plays solo, later – as a duo with the soloist and the strings in a background. The harpsichord's solo as well as ensemble episodes present the examples of organic utilization of instrument's specific features in the 20th-century music.

Synthesiser (ossia electro-guitar) is used in the climax of the Fifth Symphony.

Barkauskas effectively utilizes the harp's possibilities and its phonism quality. The composer favours glissando, a specific traditional harp effect, in the bravura forte dynamics, and a tender colourful pianissimo. Also, he often uses glissando with crescendo leading to an accented chord or a strong intonational point; also as preparation for solo entrance, a new episode or as a connector of structural parts. An interesting device is so-called 'pyramid' glissando, when leading to an accent upwards and exiting it downwards. In the Second Symphony (4<sup>th</sup> mvt., c. 18–20), the harp's 'pyramid' glissando lends an additional acoustic background and softens the sound of two accented and timbrally contrasting clusters. The harp is used both as a solo and supporting instrument.

The organ is used in two compositions. In *The Aspects*, its manifold and highly semantic function projects magnificence, solemnity, and fantastic mysteriousness. By utilizing reverberation possibilities of the organ, the composer creates an impression of a very expansive space. However, in the Third Symphony, Op 55 (1979), composed to commemorate the 400th anniversary of Vilnius University, the function of organ is suppressed.

One of the idiomatic features of Barkauskas' orchestral writing is approaching orchestra's every instrumental group as a soloist group. In some works the composer presents separate instrumental group as an ensemble with polyphonic texture. Such is an opening of the Fourth Symphony's 3<sup>rd</sup> movement where the string group is presented as a quintet. The wind instrument ensemble is marked out in the opening of the 2<sup>nd</sup> movement

<sup>4</sup> *Konzertstück N2*, Op. 103 is an exception. Its limited line-up (without piano and harp and with a limited percussion group) was determined by the commission.

of the Second Symphony, etc. In other opuses, one finds one instrumental group differentiated timbrally and functionally. The Third Symphony's episode (up to c. 32) where the leading role is given to strings is a perfect example. The opening of the Symphony (up to c. 5) is a string choral. Already in a chord in the first measure one hears rhythmic and dynamic distinction of double basses and later violas. The differentiation then proceeds in the viola group: the eighth viola (c. 1, m. 2) – pizzicato (with marimba), while other violas (c. 2) hold sound in harmonics.

From c. 5 on begins a string ensemble episode: cello quartet (a contrastive polyphony in a diatonic D minor) presents the main thematic material and forms one layer. The violins, violas and double basses generate a background of barely audible, floating and unreal cluster. By juxtaposing ensembles or unison line, diverse differentiations are achieved in all string groups.

The finale of the Fifth Symphony is a string choral with violin and viola solos.

The 2<sup>nd</sup> movement of this work is an element of brass instruments. In the episode c. 10 they comprise three layers and one line. The first trumpet presents a main motive accompanied by the long chord played by the rest three trumpets. As an opposition, the tuba plays a descending chromatic theme. Four French horns – chordal, ostinato figuration – a march, pulsation. Four trombones – a moaning glissando background.

The Second Symphony (4<sup>th</sup> mvt., c. 12) presents yet another differentiation in a brass section: the three trombone canon (eight notes) is followed by the four French horn canon (triplets) and the three trumpet canon (sixteenth notes). Thus, in the brass instrument group alone one finds three thematically and rhythmically different layers.

Differentiation within the groups remains when several groups are combined to generate both mono-timbral and poly-timbral patterns. In some cases, the differentiation can be found among the similar instruments. Ex., the first and the second trombones emphasize the signal produced by four trumpets, while the third and the fourth trombones join an ostinato rhythmic pattern played by French horns, woodwinds and strings (5 Symph., 2<sup>nd</sup> mvt., c. 15). In the Fifth Symphony the four flutes have different functions: the third and the fourth flutes interchange in a frullato  $g^1$ , a central pitch in dramaturgical terms, while the first and the second flutes join other woodwinds in a whole-tone eight-note soft cluster. The celesta is trusted two functions: the right hand supports the trills of the two oboes, while the left hand doubles English horn's thematic motive (6 Symph., 2<sup>nd</sup> mvt., c. 8), etc.

Orchestral differentiation is also characteristic to tutti episodes – neither of Barkauskas' works have a unison tutti.

Substantial orchestral differentiation is caused by the composer's many-layered dramaturgical thinking dividing the musical texture into several orchestral layers (up to five/six) and solo (or unison) lines whose functions are determined by the hierarchy. In the case of such differentiation and free combination of different instruments (ex. double bass doubles fl., double bass with celesta, fl. with timp.), the orchestral groups interact in many different ways. This is determined by the chosen textural idea of the composition, and that – by the composer's artistic idea. As an example, I have chosen several orchestral episodes in which the same three groups are featured: the woodwinds, percussion and strings. In general, such episodes abound in Barkauskas works. Interaction of these three instrumental groups even serves as a basis for the movements of several symphonies.

The compositional textural distribution of instruments has determined the classification of interaction of instrumental groups. While instrumental functional consistency (or inconsistency) determines the nature of interaction. These are the types of the interaction of three groups found in Barkauskas' works.

### **The first case – three orchestral groups embody three mono-timbral groups**

The middle section (c. 14–17) of *Konzertstück N2*, Op. 103 is a perfect example. In active and swift course of the composition this peaceful, static and mysterious section brings a contrast. From c. 14 to c. 15 three timbral groups are contrastive and independent.

Nine woodwinds (3 fl., 3 ob., 3 cl.) moving in one ostinato rhythmic formula form an imitational canon in the middle three-octave diapason. Monotonous and static woodwind pattern reminds a stiffened (frozen) swiftness.

The layer of eight strings encompasses very wide diapason (c1 – b4) and creates an image of quivering space. The double basses and the first violins frame this layer. Doubling each other within six octaves, they serve as a pedal: double basses div. and cellos hold the pedal in a low register, the first violins div. hold the octave tremolo (from m. 9 on – trills) pedal in the highest register. The expressive motive spanning a minor

third is heard in canonical imitations of the second violins div. and violas, which from measure 7 on are supported by the cellos (Example 1).

### Example 1

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The percussion is given not only rhythmic-colouristic function: a monotonous ostinato claves' pulsation is enlivened by rhythmically intensifying movement of the temple block and cow-bell. Their rhythmic climax (c. 15) blurs the distinction between the woodwinds and strings.

From c. 15 on changes happen in every instrumental group, although it might seem that the only difference is swapping of the functions. However, only strings take over the texture and function of the wind instruments, and claim a wider diapason. The woodwinds change the earlier texture into poly-chordal (alternation of two seventh-chords). Without the melodic line of the string layer, the woodwinds lose independence and take a function of a lining, even though the differentiation within this group remains quite complex. In addition,

the woodwind group is being augmented by the bassoons. There is a change in the percussion group: triangolo takes over claves' rhythmical pulsation; flexatone glissando and campanelli lend a new shade to strings (Example 2). The percussion movement intensifies before a new episode (c. 16). However, this time the percussion does not cover the strings but help them to pass over their function to the woodwinds. Thus, there are changes in interaction of the groups, their functions, as well as textural and harmonic distribution of layers. Also, new instruments are introduced.

Example 2

From c. 16 on the swinging of the strings is taken over by the woodwinds (a reprise), only a half-step higher. As if frozen, the strings are holding a wide chord (here they act as a chordal pedal). The percussion supports the woodwinds and starts diminishing the rhythmic intensity in anticipation of a new episode (c. 17). Gradually, all instruments 'take leave'. Left are only campanelli *smorzando* on a background of a single tone tremolo

from the double bass and flexatone. The highest point of stagnation is reached, even though the tempo has not changed. The strings 'awaken' from lethargy with an expressive entrance to a new episode.

### **The second case – three orchestral groups form three groups, one of which is poly-timbral**

2<sup>nd</sup> movement (up to c. 7) of the Sixth Symphony begins with the low timbre strings (cellos div. in 3; violas div. in 2; which are replaced by double basses div. in 2 in m. 12). With tied voices the five-voice angemitonal pentatonic pedal is formed in a low register. Four octaves higher (m. 6) emerges slightly dissonant solo violin's 'd', which three octaves apart is doubled by colouristic percussions (c-lli, vibr., triang.). Thus, the movement begins with the outline of a very wide space. The choice of the groups determines the colour palette providing dark matte colour to the lower layer, and crystal gleam to the higher.

In the further course of the composition the string group, acting as a pedal, remains unchanged up to a new episode (c. 7). The other group gradually grows in terms of instrument (celesta, xyl., harp, second violins div.) and pitch number (from one to three, doubled four times within four octaves) filling the space outlined at the beginning of the movement.

The third group, the woodwinds, enters in *ppp* dynamics. Three clarinets, three flutes and three oboes imitate each other (c. 5–7). They fill the middle register, activate the movement and lend additional colours. Together with the colourist group and violins, the woodwinds form polyrhythmic, polytimbral, and polyregistral (a-b-c) layer, which reminds a many-coloured stained-glass in a peaceful sunny day.

In aforementioned episode, timbral groups complimenting each other contribute to one image, but do not sacrifice autonomy and functional consistency.

### **The third case – two groups out of three are polytimbral**

In the episode (c. 5, m. 2 – c. 8) of the Second Symphony's 1<sup>st</sup> movement the ensemble of three soloists (fl., alto fl., ob.) is given the main role. Two clarinets, second violins div. and violas div. form a counterpoint. The double basses, cellos and timpani play the bass line, which is melody-like and combines both the pedal and harmonic functions. That is one of the characteristic features of Barkauskas' textural thinking.

C. 7 marks timbral changes. The first violins div. in 3 take over the main thematic material, while English horn and bassoon – counterpoint function (the number of voices has changed). The bass line remains the same.

### **The fourth case – three incomplete orchestral groups form only two polytimbral groups**

In the Second Symphony (the opening up to c. 5) such a differentiation of the three groups is based on the idea of juxtaposition of two contrastive spheres.

One pole is embodied by the third octave 'e', which the first and second violins interchangeably hold for 36 measures. In addition, the first violins are differentiated into soloists and altri. The Symphony opens with the first violin's solo harmonics in *pppp* dynamics. The unison harmonics from celesta and harp soften the violin's timbre. Emerging in c. 2 an octave lower in *ppp* the flute via flutter-tonguing (*frullato*) reaches *p* and then returns to *ppp*. The second violins take over 'e3' harmonics in *pp sempre*, while the first violins (div. in 6) spilling in quarter-tones form the semitone filled tritone-cluster (c. 5). When it vanishes, one hears double bass' great octave 'e' in *ppp* as an echo.

The other pole represents a brutal power. The lonely 'e3' in *ppp* is disrupted by a foreign and sharp (based on a tritone and minor second) unison motive (m. 7) in *subito ff marcato* from the woodwinds, timpani and lower strings (Example 3). Five-voice unison is replaced by remarks echoing the same motive. The polytimbral monody is followed by the polyrhythmic (nine different rhythmic patterns) movement and yet later (c. 4, m. 4) – a rhythmic unison and a twelve-voice melodic unison, which on a wave of growing dynamics reaches 'e' *sforzando*.

Thus, two contrastive polytimbral groups finally join in unison but without sacrificing wide distance (measure before c. 5).

**Example 3**

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Cl. b. *ff marcato* *ff sempre*

Fag. *ff marcato* *ff sempre*

I [Timp.] *ff marcato* *ff sempre*

Arpa *ppp* *pp*

Cel. *ppp* *pp*

2 V-ni soli *ppp* *ppp*

V-ni I altri *ppp* *ppp*

V-c. *ff marcato* *ff sempre*

C-b. *ff marcato* *ff sempre*

**The fifth case – three orchestral groups form two groups, one of which is polytimbral**

In the 2<sup>nd</sup> movement of the Second Symphony these two groups are led in with considerable distance in time. For 51 measure (up to c. 7) the score embodies an element of both the woodwinds and their supporting colouristic instrumental group. Then the strings are led in. The two groups form two independent characteristic images.

The composer has chosen the woodwind group to project childish laughter. Cheerful trills and descending short segments of the flutes, canonical entrances of the trills of other woodwinds, their varied interchange, which grows into nine-voice woodwind tutti trill is an excellent example of the utilization of the woodwind specifics! In order to boost the brilliance of the sound the composer emphasizes separate segments with the vibraphone, xylophone and bells (Example 4).

**Example 4**

Fl. *tr* *mf*

Ob. *tr* *mf*

Cl. *tr* *mf*

ppp

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The strings (c. 7) project strictly rhythmic dance. Their fast, canonical and imitational *leggiero spicc.* movement in triplets starting in low register of the violas brings considerable contrast. The woodwinds lose their independence and turn into background trills (Example 5).

#### Example 5

In the next episode (c. 9) the two groups gradually (almost unnoticeably) swap the functions. The woodwinds one by one flow into the canonical imitational vortex of the strings; while at the same time the strings (except cellos) in the same principle take over the woodwind trills also keeping the same number of voices.

#### The sixth case – three orchestral groups differentiate into two polytimbral groups and one solo line

At the end of *Amabile* (c. 61–63), the 3<sup>rd</sup> movement, of the Fourth Symphony the solo line is also polytimbral: after the nostalgic oboe solo its intonation of a fifth is played by the flute, then flute piccolo and bells. They are accompanied by canonical imitation between clarinet and English horn, clarinet and bassoon, violin and cello. A soft tenth-chord, played by two bassoons and three clarinets and later strings, forms a choral background for soloists.

**The seventh case – three orchestral groups do not form separate timbral groups** holding one function, even though the differentiation within the groups exists. The episode c. 7–15 in the 2<sup>nd</sup> movement of the Sixth Symphony is a perfect example. In addition to the main instruments, the composer uses alto flute, English horn and bass clarinet. All instruments and groups of strings change their functions, imitate each other, form new combinations and generate new non-recurring colours. The latter is triggered (and correlated) by an intensifying textural polyphony and appearance of new functions.

The aforementioned types of interaction between three orchestral groups encompass the episodes of completely developed idea. Certainly, the larger-scale form involves a sequence of several different types. Transitions from one to the other coincide with the structural junctures.

The overview of these examples does not present a complete list of cases of interaction between the orchestral groups utilized by the composer. However, they enable to sense a richness of Barkauskas' timbral palette and wide possibilities of traditional orchestra. This paper focuses on timbral and functional aspects of the interaction between three orchestral groups in forming the texture of the composition. Interaction between all orchestral groups in terms of dramaturgy of the composition uncovers yet another rich realm. Please, read on that and the composer's musical language, stylistics and interaction between the expression means in the next article.



## Santrauka

### Orkestrinių grupių sąveika Vytauto Barkausko simfoninėje muzikoje

V. Barkausko patirtis orkestrinės muzikos srityje. Naudojamos simfoninio orkestro sudėtys. Tradicinės sudėties variabilškumas, kai įvedami ne tik papildomi instrumentai, bet ir keičiamas atskirų grupių instrumentų skaičius (pvz., dviguba sudėtis, bet trys fleitos; triguba medinių ir keturguba varinių sudėtis ir kt.). Tradicinės orkestro sudėties naudojimo priežastys.

Trumpa kiekvienos orkestrinės grupės instrumentinės sudėties charakteristika, atkreipiant dėmesį į mušamųjų svarbą ir funkciją kompozitoriaus simfoninėje kūryboje (instrumentų kiekis, įprasti ir reti instrumentai, naudojimo dramaturgija). Be tradicinių keturių orkestrinių grupių, Barkausko orkestrui būdinga dar viena – vadinamoji „koloristinė grupė“. Apie instrumentus, neįeinančius į orkestrines grupes, tačiau įprastus Barkausko orkestre ir jų funkcijas.

Dėmesys kiekvienai orkestro grupei, išskiriant ją kaip solinę, – vienas būdingiausių kompozitoriaus orkestrinio stiliaus bruožų. Vienur visa grupė parodyta kaip ansamblis su vyraujančia balsų polifonine komplementarika, kitur – akivaizdi grupės tembrinė ir funkcinė diferenciacija, instrumentų funkcijų kaita.

Diferenciacija grupių viduje išlieka ir sujungus kelias orkestro grupes, sudarius monotembrinių grupių junginius ir įvairius politembrinius junginius. Atskirais atvejais diferenciacija išryškėja net tarp vienodų instrumentų. Didelės orkestro diferenciacijos priežastis – daugiaplanis kompozicinis Barkausko mąstymas, kai orkestrinė erdvė skaidoma į keletą sluoksnių (iki penkių šešių) ir solinių (arba unisoninių) linijų, tarp kurių egzistuoja tam tikra hierarchija ir funkcinis pasiskirstymas.

Ryškiai diferencijuojant ir laisvai jungiant instrumentus (pvz., kontrabosai dubliuoja fleitą, kontrabosai su čelesta, fleitos su timpanais ir kt.), grupių sąveika pasižymi didele įvairove. Analizei parinkti orkestrinės muzikos epizodai, kur dalyvauja tik trys tos pačios grupės, t. y. mediniai pučiamieji, mušamieji ir styginiai. Pateikiami įdomiausi sąveikos pavyzdžiai.

Kompozicinis faktūrinis instrumentų pasiskirstymas tapo įvairių sąveikos variantų klasifikacijos pagrindu. Instrumentų funkcinis pastovumas (ar nepastovumas) sąlygoja jų sąveikos pobūdį.

Apibūdinti septyni trijų orkestrinių grupių sąveikos tipai neišsemia visų kompozitoriaus naudojamų variantų. Tačiau jų pakanka pajusti turtingą V. Barkausko partitūrų paletę ir plačias tradicinio orkestro galimybes.