The Musical Language of Kazimierz Serocki in the Light of the Composer's Self-Reflection

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ABSTRACT

The article is an attempt to reconstruct the fundamental elements of Kazimierz Serocki's musical language on the basis of his own statements concerning his music. Those statements come first and foremost from his lectures prepared for the Meisterkurs für Komposition at the Musik-Akademie in Basel (1976), whose manuscripts are now held in the Polish Composers' Archive of the University of Warsaw Library. The lecture texts (*Notations- und Realisationsprobleme*, *Klangfarben als Kompositionsmaterial*, *Chance der offenen Form*) present a whole set of problems which Serocki considered as the most important for his method of composition. The central place among these problems is occupied by the idea of "composing with sound colour" ("mit Klangfarben komponieren"). Sound colour plays a decisive role in the creative process, as it constitutes self-sufficient material for composition. Sound colour has a form-shaping role in the musical work, since it can build sequences of sound structures in various configurations, which perform various functions in the piece. The idea of composing with sound colour is presented by the composer in the context of an adequate way of notating sound phenomena and the possibility of performing music from such notation. This idea was also related in the lectures to the principles of constructing polyvalent open forms (*mehrdeutige Form*) out of small- and large-scale components. Pitch organisation, on the other hand, remains of secondary interest in the composer's commentaries. Serocki's self-reflection provides us with original and innovative answers to the most important problems that contemporary composers have had to face in their work. It also provides significant and hitherto frequently little-known insights into the components of the unique style of the author of *Pianophonie*, and these insights can be effectively utilised in the course of future research on Serocki's work.

Keywords: Kazimierz Serocki, sound colour, open form, notation, musical work analysis

Is there anything that could be called Kazimierz Serocki's self-reflection? In the context of the composer's legendary reluctance to speak about his own music,[1] this question is well justified. Serocki refused to make public comments, consistently shunned microphones and cameras, even when the media wished to congratulate him on the performances of his works. Apart from a few brief notes in the "Warsaw Autumn" programme books, all of the composer's published opinions and statements are second-hand stories based on hearsay.

And still the answer to my question is positive, as confirmed by the composer's handwritten and typed lectures deposited at the University of Warsaw Library (Music Department, Archives of Polish Composers), along with other parts of his output. He delivered those lectures in 1965 and 1976, respectively during the summer courses "Encounters with Poland" at the Folkwang Hochschule w Essen and the Meisterkurs für Komposition at the Musik-Akademie in Basel.[2] These texts, characterised by formal freedom and not aspiring to the status of academic papers, were written in the German language, in which the composer was fluent, and concern his own method and technique of composition.

It ought to be emphasised that even when Serocki accepted an invitation to speak about himself, he felt evidently uneasy and embarrassed in this role. "What can one say about oneself? Not much, I believe, and even that always seems a bit pretentious to me," he said in Essen in 1965,[3] and he concluded his lecture as follows:

> It is always better to listen to music rather than speak about it. If a composer cannot convince the audience with his music, then words will not help. Today I have spoken many words. But since words will not suffice, I would like to compose, before my life ends, one more such a composition that would be utterly convincing as music alone. This is the hope I live by.[4]

The most informative are Serocki's lectures from Basel, which I am going to use in this paper as the point of departure for a reconstruction and analysis of the basic components of the composer's mature language. Serocki reacted sensitively to all the major problems of a contemporary composer's workshop, proposing his own original solutions in all the fields defined by the titles

1 A journalist's comment printed in 1973 in Warsaw's *Express* vividly conveys the gist of the matter: "Not a single answer has been provided to the questions concerning Kazimierz Serocki's works. The composer is silent. He has granted no interviews, and he refuses to talk about his music. He is one of the narrow circle of leading composers to whom Polish music owes its high status in the world, but to his audience he remains the least known, even mysterious figure. […] Many explanations have been suggested for the composer's stubborn silence. Some claim that this is part of an experiment: The composer hopes to learn if music can win its proper place without advertising, promotion, information in the press, or any other way of addressing the audience. Others are convinced that Serocki intends to speak exclusively through his music, without trivialising it with verbal comments. […] He wants people to take interest not in himself, but in his music." The Great Five of Polish Music Speak to "Express" Reporters on the Eve of the "Warsaw Autumn", *Express 20.09.1973*.

2 Cf. K. Serocki, (1965). *Komponisten-Selbstportrait* [*Composer's Self-Portrait*], typescript. Essen; K. Serocki, (1976). *Klangfarben als Kompositionsmaterial* [*Sound Colour as Composition Material*], manuscript. Basel (*Vortrag* – 20 numbered pages, *Analysen I* – 17 numbered pages, *Analysen II* – 16 numbered pages); K. Serocki, (1976). *Chance der offenen Form* [*The Chances of the Open Form*], manuscript. Basel (*Vortrag* – 21 numbered pages, *Analysen* – 19 numbered pages); K. Serocki, (1976). *Notations- und Realisationsprobleme* [*Problems of Notation and Interpretation of the Contemporary Score*], manuscript. Basel (*I. Notation* – 15 numbered pages, *II. Realisation* – 12 numbered pages).

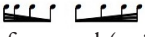
3 Idem, (1965). *Komponisten-Selbstportrait*, op. cit., p. 1.

4 *Ibid.*, p. 10.

of his presentations: *Notations- und Realisationsprobleme*, *Klangfarben als Kompositionsmaterial* and *Chance der offenen Form*.

NOTATION AND PERFORMANCE

> The composer does not only compose the music. He must also have a vision of its performance. The composer should not only be skilful at structuring and instrumenting the work, etc., but should also be able to imagine how the music is going to be executed in actual performance on the basis of the provided notation. While working on the score, the composer ought to be able to predict all the possible reactions of the performers and do his best to define a performance that will most faithfully reflect his intentions.

The above is a fragment of Serocki's lecture entitled *Notations- und Realisationsprobleme*.[5] After experiments with the twelve-tone technique and punctualism, Serocki was convinced that co-operation between the composer and performers needed to be restored so as to prevent "a serious crisis situation". He observed, for instance, that extreme precision in notating rhythmic phenomena put off the performers, as the score proved impossible to render accurately. With a sense of absurd, the performers consequently resorted to playing just "anything". Serocki therefore proposed his own way of notating rhythm and tempi, based on easily interpreted graphic signs and formulas that were not difficult to perform. These included: tone duration signalled by the length of a horizontal line; symbols for periodic and aperiodic tone sequences, for the fastest possible performance of tone sequences, for gradual retardation and acceleration of musical tempi (), and for rapid aperiodic repetition of a sound (as in the Morse code ).[6]

Serocki notated rests as empty spaces in the score. In this way, breaks and continuations in the notation could become visual clues for the conductor, thanks to which he or she could better control the whole and indicate to the musicians where they should enter. Also the spatial organisation of the scores, often set for untypical performing forces appearing in untypical venues – was aimed at the most faithful rendering of the composer's intentions in actual performance. Serocki claimed that in order to help the conductor read the score and facilitate his or her visual contact with the musicians, instrumental groups in the score should be notated from left to right (from the conductor's point of view). If the groups are scattered or mixed on the stage, they can also be listed by register (from the highest to the lowest).

The composer saw many advantages in the division of the musical progression into segments (with duration indicated in seconds and / or divided by dotted vertical lines). First of all, this convention allowed him to notate all kinds of rhythmic structures, mix precise time-values with free structures (i.e. those performed by instrumentalists on the basic of graphic ratios), and thus reconcile freedom of interpretation with the composer's control.[7] What is more, in the case of music for large ensembles, this type of notation made it much easier for musicians to retain control in sections with particularly dense rhythmic movement. As Serocki observed – not without satisfaction – his system proved easy to master for the performers, effectively prevented his scores from becoming unperformable, and the musicians themselves confirmed that his solutions worked fine in practice.

As for the "action notation," i.e. notation which represents an action leading to a specific sound result – Serocki used it sparingly and only when necessary. He was opposed to the chaotic accumulation of action symbols, and laid down the following guidelines in order to reduce the number of such symbols:

1. Never introduce a new symbol when a precise or approximate realisation can be notated by means of traditional symbols, or of commonly known signs already in use.
2. Whenever you do introduce a new symbol, it ought to meet the following requirements:

a) It must be unequivocal and represent just one specific type of action, progression, etc.
b) Its visual form should be sharply distinguished from that of other symbols.

3. The new symbol ought to be applied consistently in the same sense in all the compositions to come.
4. The form of the symbol ought to convey its meaning graphically, by means of visual associations, without the need for any verbal commentary.[8]

Serocki's concept of notation adequately answering to the challenges of contemporary music followed three basic rules. The first of these was the principle of consistent use of graphic symbols, the second – "writing with the musicians in mind", always mindful of the

5 Idem, (1976). *Notations- und Realisationsprobleme (Notation)*, op. cit., p. 2.

6 "From my observation, with the passage of years many composers have adopted my system of notation, in part or as a whole," Serocki remarked. Cf. *ibid.*, p. 9.

7 Serocki was aware of the existence of a notation system for the *ad libitum* sections developed by Witold Lutosławski in the 1960s. This system did not satisfy him, though, as it could not be applied simultaneously with traditional notation and was not adaptable "for composing with sound colours, and for action notation." Cf. K. Serocki, (1976). *Notations- und Realisationsprobleme (Notation)*, op. cit., p. 9.

8 *Ibid.*, p. 15.

limits of performability.[9] The third principle concerned the acoustic reality behind the given set of symbols. "When we compose, we must always listen, not just write and hope that things will work out somehow. I can assure you that in many cases things are not going to work out,"[10] Serocki claimed with conviction.

SOUND COLOURS AS MATERIAL FOR COMPOSITION

Serocki's artistic stance derived from his conviction that contemporary music should undergo a revival. Like many other composers, he discerned a serious crisis in the music of the mid-1960s, especially with regard to form. The commonly accepted rule that elements ought not to be repeated – effectively prevented listeners from understanding and experiencing the musical organisation of the work. One solution to this problem was to introduce "new formal elements" (*neue Formelemente*), which Serocki mentioned as early as 1965 in his artistic self-portrait for the Essen lectures.[11] Their fundamental constructive element was sound colour – a component previously neglected by composers.

> Never in the history of music has sound colour been the composers' and musicologists' "favourite". Even though its presence was generally accepted, it was considered as something secondary and unimportant, a bit like a servant, who after many years is treated *almost* like a family member, but actually she is not one,[12]

observed Serocki in the opening of his Basel lecture entitled *Klangfarben als Kompositionsmaterial*.

Having noted that in some compositions of the late 1950s and early 1960s a greater significance was attached to the element of sound colour, the composer set out to convince the listeners that it could in fact play a decisive role in the creative process. He demonstrated to his audience the inexhaustible wealth of sound colours, categorised in accordance with his own system (instrumental, percussive, vocal and electronic colours) and, rather than applying simple sound "effects," he proposed to "compose with sound colour" (*mit Klangfarben komponieren*) in a systematic manner. According to Serocki, creating an acoustically recognisable musical form by means of different colours is only possible when "one composes *exclusively* with these colours" [composer's own emphasis]. He also claimed that any given type of colour "should be applied only once" in one piece of music.[13] The composer also suggested that sound colours could

> […] appear as lines of different timbres; their rhythmic progressions – as structures of sound colours; their sound fields – as combinations or complexes of sound colours. Thus, sound colours can be the construction blocks of musical form and are capable of replacing and representing any other music material that was considered important in the past.[14]

In order to explain the relations between various timbres, Serocki compared them to the relations between the chords (triads) taking on various functions in functional harmony. Composing with sound colours should similarly depend on transformations of their mutual relations. Of fundamental importance to this concept is the attribution of specific qualities to each timbre, which guarantees that it will be recognised by the listeners as unique. Once employed in the composition, such a sound colour does not lose its value as material to be reused later on. It can reappear in many compositions, in each case – entering into a different relation with the other timbres. Serocki's second condition for composing with sound colours was that they should be easily performable. The third "commandment" concerned the experimental character of work on such a composition and its rooting in the composer's acoustic imagination.[15]

In his lecture *Klangfarben als Kompositionsmaterial* Serocki analyses four of his own works: *Swinging Music*, *Phantasmagoria*, *Impromptu fantasque* and *Arrangements*. They represent three different concepts of form: "completely traditional," "segmental" and "open." Let us begin with a closer look at the first of these analyses, whose aim was to demonstrate "how entirely traditional form, notated in the traditional manner and characterised by periodic rhythmic structures, could be revived by an appropriate use of sound colours."[16]

Within the course of the composition, Serocki distinguished – and presented on a diagram (Ex. 1)[17] –

9 Idem, (1976). *Notations- und Realisationsprobleme (Realisation)*, op. cit., p. 11.

10 *Ibid.*, p. 12.

11 Idem, (1965). *Komponisten-Selbstportrait*, op. cit., p. 9.

12 This is one of Serocki's best known statements, also cited in a different form by Tadeusz A. Zieliński (cf. T.A. Zieliński, (1985). *O twórczości Kazimierza Serockiego* [*On the Works of Kazimierz Serocki*]. Kraków, pp. 84–85).

13 K. Serocki, (1976). *Klangfarben als Kompositionsmaterial (Vortrag)*, op. cit., p. 12.

14 *Ibid.*, pp. 12–13.

15 "It is prerequisite […] that the artist composing with sound colours should first experience with his ears and commit to memory as many different types of timbres as possible (both previously existing ones and those that he has discovered himself), so that at any given time during the composition process he should be able to imagine the final effect of his work," Cf. K. Serocki, (1976). *Klangfarben als Kompositionsmaterial (Analysen I)*, op. cit., p. 1.

16 Idem, (1976). *Klangfarben als Kompositionsmaterial (Vortrag)*, op. cit., p. 16.

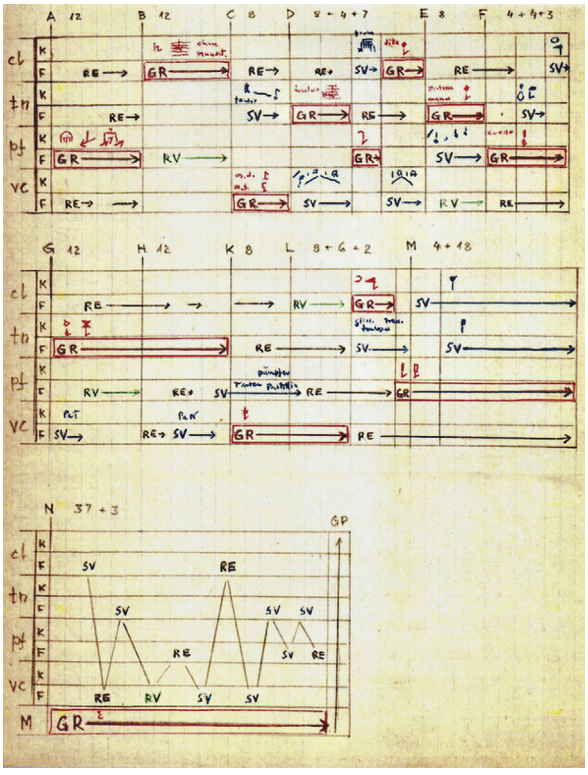
17 *Ibid.*, p. 17.

twelve sections (marked from A to N), with dynamics increasing from *ppp* to *fff* in section N (constituting a kind of coda), and then decreasing in the same section down to complete silence. Serocki pointed to the "principle of variation" as the main determinant of musical development in the piece. This principle depends on four constitutive elements:

1. the fundamental rhythmic pattern (GR), which creates the pulse in the composition ♩ 𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯 ♩ 𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯;
2. a rhythmic complement to the fundamental rhythm (RE), which plays a secondary role as a kind of "filler";
3. rhythmic variation (RV);
4. solo variation (frequently in a nearly melodic sense) (SV).

The main part of Serocki's analysis consists of a specification of the forty sound colours applied (including 8 in the clarinet, 10 in the trombone, 9 in the cello and double-bass, as well as 13 in the piano part and one vocal colour, formed by the sound C-H), and a description of their functions in the various elements of form. Thus, the ostinato rhythmic pulse comprises 13 different percussive colours and demonstrates that "instrumental sound colours can well replace a jazz percussionist."[18] The following sound colours appear in succession:

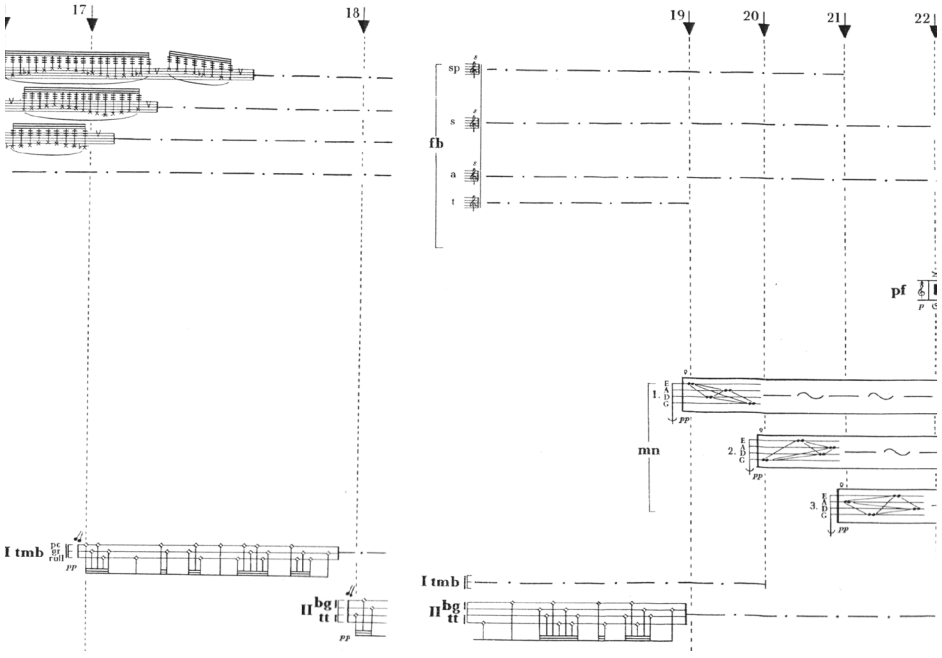
1. The piano – rub the tuning pins with a plastic brush.
2. The clarinet – blow soundlessly into the instrument producing the tone of B, without the mouthpiece.
3. The cello – strike the top of the soundboard with the right hand and the side – with the left hand.
4. The trombone – produce a soundless B♭; blow gently touching the mouthpiece with your lips.
5. The piano – strike the front half of the open lid with the fingers.
6. The clarinet – without the mouthpiece, strike the tube (the barrel joint) of the instrument with the fingers.
7. The trombone – strike the mouthpiece with the open palm of the hand.
8. The piano – strike the strings (in the register marked) with the open palm of the hand.
9. The trombone – blow into the mouthpiece touching the hole of the instrument tube at the angle of 30 degrees.
10. The cello – strike the strings near the fingerboard with the open palm of the hand.
11. The clarinet – play on the mouthpiece only, with the half-open palm of the hand.
12. The piano – strike the black or white keys with the open palm of the hand.
13. Voice – pronounce the sound „ch" loudly.



Ex. 1. K. Serocki. The musical form of *Swinging Music* – a diagram.

The solo variation takes over the role of the melodic component. It manifests itself, as Serocki explained, in the use of "re-formed" (*umgeformte*) pitches. These pitches are responsible for two kinds of colours: deformed but still "standard" timbres with definite pitch (e.g. a soundless frullato performed on the clarinet without the mouthpiece, and a fourth below – a *pizzicato sul tasto* in the cello, or striking the unwrapped part of the piano string with a triangle wand), as well as "improvised" timbres of indefinite pitch (e.g. playing the clarinet with the reed pressed between the teeth, so that changes of pitch and sound colour are produced by varying tooth pressure and lip shape). Serocki stressed that the variations are usually very short, undeveloped, and each immediately gives way to the next one. The number of their appearances in the composition is the same (13), but at the climactic point (section M) two solo variations (in the clarinet and the trombone) are introduced simultaneously. In the coda (section N) the

18 *Ibid.*, p. 18.



Ex. 2: K. Serocki, *Impromptu fantasque*, nos 17–21.[21]

solo variations are partially "recollected." In this section, Serocki added four new sound colours: two in the cello (a glissando produced by strongly pressing the bow moved along a given string and a glissando obtained by turning the peg and unwinding the string), one in the piano (a glissando with the fingernails on the strings), and one in the trombone (obtained by rubbing the dampened mouthpiece inserted in the instrument with the thumb wrapped in a handkerchief, which produces a "creaking" sound).

In his analysis of the form-shaping role of sound colour in his "segmental" compositions – *Phantasmagoria* and *Impromptu fantasque* – Serocki not only discussed the sequences and overlaps ("mixtures")[19] of timbres, but also elaborated on how the functions of one and the same colour change in different works. In this manner he illustrated the phenomenon of the "sound colour harmony" in varying instrumental settings.[20] One of his examples concerned the sound colour appearing in the 9th segment of *Phantasmagoria*, obtained by striking the edges of bongos and tom-toms with upturned mallets. This colour is first introduced soloistically, then – against the sound of mallets rubbing the piano strings. In *Impromptu fantasque*, nos. 17–18 (Ex. 2) the same timbre appears in a wider context created by drums and recorders. The soundless frullato of the flutes (without mouthpieces) forms – as Serocki emphasised – a different type of acoustic background, which is gradually replaced by a complex colour structure provided by the mandolins (strings plucked with a soft plectrum). The same timbre is employed in yet another role in *Fantasia elegiaca* for organ and orchestra, no. 52, where it is initially presented against the background of noise-like whistling in the highest registers of the organ and glissando-flageolets in the violins. The soloist function of this colour changes in no. 54, where it is mixed with a different percussive colour (playing with upturned mallets on temple blocks) and in no. 55, where it is combined with the percussive colours of wind instruments, and where it gradually fades away, giving way to the more and more distinct organ colours.

OPEN FORM

Serocki stressed that composing with sound colours is especially significant in the context of "open form". In Basel he dedicated a separate lecture (*Chance der offenen*

19 Relatively detailed analyses of both works, conducted from this perspective, are the subject of the second part of the lecture – *Analysen I*.

20 This subject is discussed in the final fragment of the *Analysen II* section. Cf. K. Serocki, (1976). *Klangfarben als Kompositionsmaterial (Analysen II)*, op. cit., pp. 9–16.

Form) to this formal concept. He began by proposing his own definition of form: "Form in music is what makes possible the sensual perception of the shape of a certain progression in time (*Zeitgestalten*)." He then made the following detailed assumptions:

1. Form is more than a mere formal scheme of some kind.
2. Form is psychologically subjective – and therefore also premeditated.
3. In the study of perception, form should be understood not only as a subjective psychological phenomenon, but also as a way of organising time.
4. Organised time patterns, usually called structures, can only become form when they are perceived by the ear.[22]

In his classification of formal concepts typical of 20th-century music,[23] Serocki distinguished two types of open form: "mobile form" (*mobile oder variable Form*), in which the overall form (*Großform*) is predetermined, but individual elements (*Formelemente*) are not fixed, and "polyvalent form" (*vieldeutige oder mehrdeutige Form*), in which individual elements are fixed but the whole remains undetermined. The latter, as one that can exist in many performance variants, was especially interesting for the composer himself, as a model for his compositions. Serocki was well aware of the controversy aroused by various ideas of the "openness" of the musical work among musicologists and composers. Those ideas usually resulted in complete disintegration of the organisation of music material, and consequently made it impossible for the listener to assess the accuracy of a given performance version.[24] In order to overcome these obstacles, Serocki laid down a number of guidelines to be followed. To begin with, each element of form must constitute a separate and complete "musical structure", understood as a "purely musical" concept. Secondly, each such structure needs to possess "its own, clearly defined musical character, in other words – it should be able to act as an intermediary and thus become comprehensible." Thirdly, the structure must be composed in such a way that it has the quality of being connectible (*Anschlußmöglichkeiten*) to other structures, so as to form a unified progression with those structures, which is recognised by the listener as a "relation with respect to form."[25]

For polyvalent form to become fully comprehensible to the listener, the composer ought to include all the existing structures (elements of form), that is, demand that all the structures be performed in every performance variant. "In this way, the listener will always be presented with the complete substance of the work, albeit in different performance versions. This is important, because it allows the listener to grasp the formal concept of the whole, and makes it possible for the composer to preserve the unique identity of the work,"[26] Serocki claimed.

Secondly, the structures making up a polyvalent one-part form ought to be diversified with regard to their "character", because "the diversity and uniqueness of individual structures creates […] more favourable conditions for combining them into the overall form."[27] Thirdly, in polyvalent multi-part form, i.e. form built of large "segments" that contain smaller ones, the latter ought to be "based on the principle of immutability," that is, be similar to one another and jointly contribute to the common musical character of the whole large-scale segment. The large-scale segments, on the other hand, need to be clearly differentiated and – despite their exchangeability in actual performance – always enter into "comprehensible relations with each other with regard to the overall form."[28] In the analytic part of his lecture, Serocki illustrated the principle of polyvalent form construction with the example of a model composition consisting of four large-scale segments (different in character: slow, lively, expressive and smoothly progressing), which in turn comprise 31 small-scale segments. He also included a section concerning

22 K. Serocki, (1976). *Chance der offenen Form (Vortrag)*, op. cit., p. 1.

23 *Ibid.*, p. 5. The most important of these concepts were – apart from open forms – "segmental form" (*Segmentform*), "momentary form" (*Momentform*), stochastic form (*Stochastik*), "plausible form" (*Wahrscheinlichkeitsform*), graphic form (*Graphik*), and improvisation (*Improvisation*).

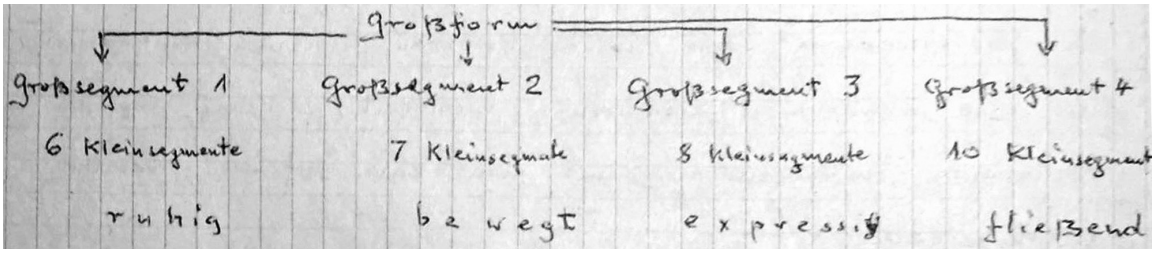
24 Serocki pointed to only two examples of mobile form that have stood the test of criticism, both – famous compositions originating in the Darmstadt circles: Stockhausen's *Zyklus* and Boulez's *Piano Sonata* No. 3. In the former, the recognition of formal pattern is facilitated by "the main cyclic line, which must be performed in every version," and in the latter – by the arrangement of formants, which "in a sense leads to a great tripartite form." Cf. K. Serocki, (1976). *Chance der offenen Form (Vortrag)*, op. cit., pp. 12–13.

25 *Ibid.*, pp. 17–18. In the analytic part of his lecture, Serocki recommended linking the individual structures in such a way that "instruments introduced in the opening of the first structure do not reappear at the close of the second structure, but they should appear in both structures either at the end or in the middle, so that a rest can be placed before the entry of the second structure." Cf. K. Serocki, (1976). *Chance der offenen Form (Analysen)*. Basel, p 19.

26 K. Serocki, (1976). *Chance der offenen Form (Vortrag)*, op. cit., p. 18.

27 *Ibid.*.

28 *Ibid.*, p. 19.



Ex. 3: K. Serocki, Model of a great polyvalent form.

the possibility of diversifying the instrumentation of the small-scale segments (see Ex. 3).[29]

Another composition used by Serocki as an example is *A piacere* for piano (1963). The composer described in much detail the technical solutions applied in this work (pitch distribution, dynamics, rhythm, articulation) in order to illustrate the idea of differentiating the "character" of its three large-scale segments, which he defined as "sarcastic-humorous," "lyrical-levitating" (corresponding in character to the slow movement in traditional musical forms) and "nervous and brutal, barbaric at times." For actual performance, these three can be arranged in six different sequences.[30]

A special place in Serocki's self-commentary is occupied by his analyses of *Arrangements* for 1–4 recorders,[31] which can be found in two different texts. A detailed description of the different ways of composing with sound colour in each of the 17 segments (basic formal units) and in 15 variants of instrumentation (in the lecture entitled *Klangfarben als Kompositionsmaterial*)[32] is complemented by a commentary in the analytic section of his lecture on form.[33] The musical material in this piece comprises 60 different colours, whose distribution in segments for more than one flute allows for a solo performance of each part and/or any combination of parts.[34] Serocki's classification and discussion of those sound colours leads to sound examples from the duo and quartet versions of the composition. The examples are made up of a varying number of segments, but they have some segments in common. In this way Serocki intended to convince his audience that despite differences in sound "both the character and the continuity of form in these [shared – note by I.L.] segments have been preserved and are still clearly recognisable."[35] The composer also emphasised that the presence of the three quartet segments in each of the performance versions greatly contributes to an understanding of the overall form of the piece. These quartet segments were composed in accordance with the principle of character differentiation ("chorale," "virtuosic" and "melismatic").

All those examples – both theoretical and selected from his own output – assisted Serocki in demonstrating the enormous potential of polyvalent form. This potential depended first and foremost on that form's ability "to constantly renew itself," as it placed at the composer's disposal unlimited possibilities of combining "musical characters" in the process of composing overall form out of small- and large-scale segments. An appropriate selection and moulding of the musical material allowed the composer of such forms to endow each version of the music with an individual character, and on the other hand – to preserve the identity and guarantee the reproducibility of a given work. It also provided the audience members with the comfort of being able to grasp in their perception all the possible syntactic relations

29 In the case of a work for an orchestra made up of five basic instrumental groups (woodwinds, brass, plucked strings, percussion and bowed strings) Serocki indicated the possibility of using an orchestral tutti, five different combinations of four instrumental groups and ten combinations of two or three instrumental groups. He also considered further combinations resulting from the line-ups of the individual groups. Cf. K. Serocki, (1976). *Chance der offenen Form (Analysen)*. Basel, pp. 14–16. Serocki most probably applied these principles during his work on the orchestral *Ad libitum* in the mid-1970s.

30 *Ibid.*, pp. 2–9.

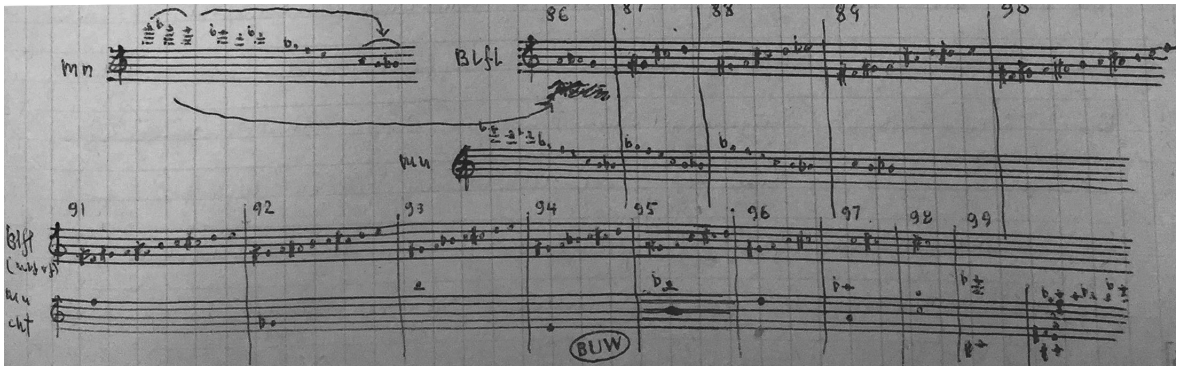
31 Since the composer accepted the possibility of performing different versions of the same work during one concert (and also in different spaces in the same building), it is important to properly interpret the title of the work, which should be read as in English, in the sense of, among others, "installation, agreement, preparations, planning, etc." "My idea for this composition contains each of these meanings – to some extent," Serocki admitted. Cf. K. Serocki, (1976). *Chance der offenen Form (Analysen)*, op. cit., p. 9.

32 K. Serocki, (1976). *Klangfarben als Kompositionsmaterial (Analysen II)*, op. cit., pp. 1–9.

33 Idem, (1976). *Chance der offenen Form (Analysen)*, op. cit., pp. 9–14.

34 In the case of a segment for soprano, alto and tenor flutes, apart from a trio version there are also three possible solo variants (S, A, T) and 3 duos (SA, ST, AT).

35 K. Serocki, (1976). *Klangfarben als Kompositionsmaterial (Analysen II)*, op. cit., p. 9.



Ex. 4: K Serocki, Pitch organisation in *Impromptu fantasque*, bars 86–100.

within the work. However, the word "chance" in the title of the lecture should also be read in the context of more general philosophical reflection. In Basel, Serocki said:

> Sounds may remain just sounds, but they can also become Beethoven, Brahms, Debussy, Stravinsky or Boulez. It is a great achievement and merit of those listed above, but also – of other composers whom I haven't named here – that they transformed "just sounds" into art with their talent. In my opinion, the open form can give such a chance to many other composers.[36]

It is notable that pitch organisation was of marginal significance to Serocki's self-reflection. This was undoubtedly a consequence of the primacy of sound colour over other musical components, which was the central tenet of Serocki's composition technique from that time of *Segmenti* onward. Nevertheless, Serocki did mention methods of pitch organisation in his texts about composing with sound colour and about the open form. The composer's analysis of his own *Impromptu fantasque* provides interesting insights into the mechanism by means of which a twelve-tone structure in the mandolins and the guitars takes over individual pitches from another twelve-tone structure in the recorder part. This process, taking place in bars 86–100, was concisely represented by the following outline scheme (Ex. 4).[37]

A closer look at the score will allow us to describe this phenomenon in greater detail. At the point of departure, we have yet another twelve-tone field (A6–A♭6–G6–E♭6–D6–D♭6–G♭5–F5–E5–C5–B4–B♭4) in bar 89, where a twelve-tone structure gradually fading out in the mandolins (repeated groups of sounds) provides a background for the noise-like frullato in the recorders. As the texture in the recorder section grows denser, this section "steals" more and more pitches from the mandolins, which leads to the appearance of sound fields with variable number of different sounds. A ten-tone structure appears in bar 90. Later, from bar 91 onward, the opposite process begins to take place: the sound structures in the recorders (and the repeated sound groups in the vibraphone and marimbaphone parts) gradually disappear, while another sound field develops in the mandolins and the guitars (a fast and dense tremolando). The pitches "stolen" from the recorders (cf. the mandolin and guitar parts from bar 91 onward) successively overlap and gradually (by bar 99) build up a twelve-tone structure (F5–G♭4–B5–E4–B♭5–D5–A4–A♭5–C5–G5–C#4–E♭6), which in the following sections of this composition functions as a kind of a "wall of sound".

In his analysis of *A piacere*, on the other hand, the composer explains how he used the "resources of sound material", consisting of the entire range of tones on the concert piano, as well as the "unit of material", made up of twelve semitones. In each of the three open-form segments, Serocki used 88 different pitches, each of which appears twice. In the individual structures (notated in frames) he applied the "principle of rotation" of the twelve semitones, which allowed him both to differentiate the number of pitches used and to repeat the same tone or group of tones. In ten consecutive structures of the second segment of *A piacere*, we hear respectively 14, 11, 19, 29, 9, 16, 22, 12, 17 and 27 different tones (making up a total of 176 = 88 x 2).[38]

Concluding this survey of issues discussed in Serocki's commentaries on his own music, we need to emphasise that many of the composer's observations cited above served as an excellent point of departure for expanding the scope of studies dedicated to his music and for defining new points of focus for this research. Most of the existing studies look at his output from the sonoristic perspective, stressing the special place of sound colour in Serocki's

36 Idem, (1976). *Chance der offenen Form (Vortrag)*, op. cit., p. 20.

37 Idem, (1976). *Klangfarben als Kompositionsmaterial (Analysen I)*, op. cit., p. 13.

38 Idem, (1976). *Chance der offenen Form (Analysen)*, op. cit., p. 4.

music and the composer's involvement in that current of 20th-century Polish music, which has since become an object of national pride.[39] The composer himself clearly emphasised the primacy of sound colour in his musical language, and this fact can be seen as a sufficient justification for attempts at interpreting his music in the categories of "pure sound."[40] Still, analyses should not be limited to this one particular perspective. In Serocki's self-commentaries, sound phenomena are inextricably linked with the context of form (including open form), musical space, adequate notation and performability. Therefore, the composer's texts suggest that analyses ought not to be limited to a more or less elaborate, descriptive catalogue of musical "effects" applied in the course of the composition. The composer informs us directly that what is most important about his use of sound colours is their varied functions, which should properly be recognised – as he claims – not so much with the eye as with the ear.[41] Serocki's surviving self-commentaries also indicate that research into the colour-pitch relations needs to be continued and verified,[42] and that no less important results can be expected from an in-depth study of the twelve-tone fields present in his compositions.[43] A survey of the composer's self-reflection, as presented in this paper, also points to the need for more work in the hitherto relatively neglected area of comparative studies, especially – with regard to comparison with the notational, textural and harmonic solutions applied by Witold Lutosławski.

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39 The statistical domination of this approach to Serocki's work is confirmed by the very titles of publications. Cf. e.g. L. Davies, (1983). Serocki's Spatial Sonoristics, *Tempo* No. 145, pp. 28–32; T. Kienik, (2004). Sonorystyka w twórczości fortepianowej K. Serockiego [Sonoristic Elements in Serocki's Piano Works] In: J. Krassowski (Ed.), *Muzyka fortepianowa XIII* [*Piano Music XIII*]. Gdańsk: Wydawnictwo Akademii Muzycznej, pp. 233–245; J. Paja-Stach, (2008). Relationships of Kazimierz Serocki's Music with Sonorism, *Muzyka*. Vol. LI, No. 1–2, pp. 107–118.

40 The methodological basis for such studies was provided by the works of Józef Michał Chomiński, who as early as in the mid-1950s introduced the concept of sonoristics and the sonoristic technique to Polish musicology, and later used these concepts as the basis for his unique analytic theory. Cf. e.g. Józef M. Chomiński, (1956). Z zagadnień techniki kompozytorskiej XX wieku [Problems of 20th-Century Composition Technique], *Muzyka*. Vol. I, No. 3, pp. 23–8; J. M. Chomiński, (1961). Technika sonorystyczna jako przedmiot systematycznego szkolenia [The Sonoristic Technique as a Subject of Systematic Training, *Muzyka*. Vol. VI, No. 3, pp. 3–10.

41 This kind of analytic studies can now be supported by digital tools, used e.g. by the author of this paper in her analysis of *Segmenti* (I. Lindstedt, (2010). *Sonorystyka w twórczości kompozytorów polskich XX wieku* [*Sonoristics in the Output of 20th-Century Polish Composers*]. Warsaw: Wydawnictwa Uniwersytetu Warszawskiego, pp. 255–369). On the other hand, research conducted by Justyna Humięcka-Jakubowska opens up the psychological-cognitive perspective on Serocki's work. The author analysed the process of the composer's communication with the listeners on the example of *Forte e piano*. (J. Humięcka-Jakubowska, (2008). Mental Representations of Tonal Images in Twentieth-century Sonoristic Compositions. In: Danuta Jasińska, Piotr Podlipniak (Eds.), *Interdisciplinary Studies in Musicology* 7. Poznań: Wydawnictwo Naukowe UAM, pp. 185–210).

42 Cf. T. Kienik, (2004). Związki między barwą a wysokością dźwięku w wybranych utworach K. Serockiego [The Colour-Pitch Relations in Selected Works by Kazimierz Serocki], *Muzyka*. Vol. ILIX, No. 3, pp. 61–90; T. Kienik, (2013). The Musical Language of Kazimierz Serocki: Analytical Aspects of His Musical Output. In: E. Mantzourani (Ed.), *Polish Music since 1945*. Kraków: Musica Iagellonica, pp. 290–299.

43 Bożena Gawrońska linked pitch organisation in Serocki's works to the construction of specific sound models by the composer (cf. B. Gawrońska, (1982). Organizacja tworzywa muzycznego w twórczości Kazimierza Serockiego (lata 1960–1970) [Organisation of Sound Material in K. Serocki's Works in the 1960s and 70s], *Muzyka*. Vol. XXVI, No. 2, pp. 23–28). Adrian Thomas presented interesting observations concerning the place of twelve-tone fields in *Dramatic Story* (A. Thomas, (2005). *Polish Music since Szymanowski*. Cambridge: Cambridge University Press, pp. 153–154).

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