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MUZIKOS KOMPONAVIMO PRINCIPAI: | PRINCIPLES OF MUSIC COMPOSING:

ciklo fenomenas | Phenomenon of a Cycle

VI

Turinys / Contents

Pratarmė

Šis leidinys sudarytas iš mokslinių straipsnių, perskaitytų šeštojoje tarptautinėje muzikos teorijos konferencijoje „Muzikos komponavimo principai: ciklo fenomenas", surengtoje 2006 m. spalio 25–27 d. Vilniuje. Konferencijos pranešimų autoriai daugiausia dėmesio skyrė trims konferencijos reglamente numatytoms potemėms: pirmoji – ciklo samprata bei struktūriniai, semantiniai, kognityviniai ciklinės formos aspektai; antroji – kompozicinės ciklinio principo realizacijos įvairių epochų muzikoje, trečioji – ciklo fenomenas ir jo transformacijos XX–XXI a. kompozicijose.

Konferencijos rengėjai – Lietuvos muzikos ir teatro akademija ir Lietuvos kompozitorių sąjunga. Konferenciją finansiškai parėmė Lietuvos Respublikos kultūros ir sporto rėmimo fondas bei Lietuvos valstybinis mokslo ir studijų fondas.

Konferencijoje pranešimus skaitė autoriai iš aštuonių šalių: Lenkijos, Rusijos, Rumunijos, Didžiosios Britanijos, JAV, Prancūzijos, Suomijos ir Lietuvos.

Pranešimai, atliepiantys pirmajai potemei, siekia atskleisti faktorius, nusakančius muzikos kūrinio cikliškumą (R. D. Golianek, M. Katunyan), atrasti matematinių modelių požymius (P. Puscas), susieti muzikos cikliškumą su socialiniais fenomenais (I. D. Sutherland).

Antrosios potemės pranešimai konkretizuoja ciklinės sąsajos apraiškas: monograminė (R. Janeliauskas), tonacinės semantikos (J. Mianowski), medžiagos sugrąžinimo (K. Chardas), ciklinio stiliaus renovavimo (S. G. Young), spontaninio motyvavimo (R. Janeliauskas).

Trečiosios potemės pranešimai sufokusuoti į ciklinio fenomeno transformacijų daugialypiškumą, būdingą šiuolaikinės simfoninės (A. Piotrowska, A. Žiūraitytė), kamerinės (S. Barkauskas, K. Stiga, T. Ilomäki) bei elektroninės muzikos (R. Mažulis) kūriniams.

Leidinys turėtų būti įdomus kiekvienam, kuris domisi muzikos ciklo komponavimo bei struktūros problemomis. Redakcinė kolegija tikisi gausaus skaitytojų rato tiek čia, Lietuvoje, tiek ir užsienyje. Atsiliepimus ir pastabas prašome siųsti elektroniniu paštu: mbaranaus@yahoo.com

Organizatorių vardu dėkojame leidinio rėmėjams ir rengėjams.

Doc. dr. R. Janeliauskas

Foreword

This publication is comprised of scientific reports made at the 6th international music theory conference "Principles of Music Composing: Phenomenon of a Cycle" held on 25–27 October 2006 in Vilnius. At the conference, the speakers particularly actively responded to the following three subthemes of the conference: first – concept of a cycle, structural, semantic and cognitive aspects of cyclic form; second – compositional realization of a cyclic principle in the music of various epochs; third – phenomenon of a cycle and its transformation in the 20th–21st centures compositions.

The organizers of the conference – the Lithuanian Academy of Music and Theatre and the Lithuanian Composer's Union. The conference was supported by the Fund for the Support of Culture and Sport of the Republic of Lithuania and the Lithuanian State Science and Studies Foundation.

At the conference reports were made by musicologists from 8 countries: Poland, Russia, Rumania, Great Britain, USA, France, Finland and Lithuania.

The aim of the reports on the first sub-theme was to reveal the factors characterizing the cyclic nature of a piece of music (R. D. Golianek, M. Katunyan), to discover some features of mathematical models (P. Puscas) and to associate a cyclic nature of music with social phenomena (I. D. Sutherland).

The reports on the second sub-theme concretized manifestations of a cyclic link: monogramic (R. Janeliauskas), of intonational semantics (J. Mianowski), the return of the material (K. Chardas), a cyclic renovation of style (S. G. Young) and a spontaneous motivation (R. Janeliauskas).

The reports on the third sub-theme were focused on the multiplicity of transformations of a cyclic phenomenon characteristic of symphonic (A. Piotrowska, A. Žiūraitytė), chamber (S. Barkauskas, K. Stiga, T. Ilomäki) and electronic music (R. Mažulis) works.

Editors and compilers believe that the publication should be interesting to everybody who cares for the composer's process of creation and the issues on creativity on the whole. The editorial board expects a wealth of readers in Lithuania and abroad and says thank you for comments and observations in advance. We kindly ask you to send your observations by e-mail: mbaranaus@yahoo.com

In the name of all the organizes we thank all those who morally or materially contributed to this publication.

Dr. R. Janeliauskas, Ass. Prof.

Ryszard Daniel Golianek

A Cyclic Musical Composition
from the Theoretical Perspective

The concept of the musical cycle, present both in a cyclic musical composition and in a cycle of musical compositions, seems to be one of the most common research questions undertaken during musicological analyses. Cyclic musical works appeared in various periods of European musical history, and they are still composed in the present day. All this suggests that the actual idea of a cyclic composition is one of the immanent features of musical creativity. It is no wonder musicologists try to understand this phenomenon in their essays and articles. Unfortunately, it seems humanly impossible to study all these musicological writings: when we enter the word *cycle* in the RILM electronic base, the most important bibliographical source for musicologists, we find more than 3200 records! These are mainly various studies devoted to particular cyclic compositions and the authors generally present the results of their musicological analyses of these compositions. However, it is reasonable to expect that some of these writings contain theoretical considerations suitable for our present subject. In fact, when we take the huge amount of texts into consideration, it seems impossible to find any convincing methodological criteria that could help us in limiting this bibliography. Therefore, I decided to choose another procedure – I looked through all the available musicological reference books (encyclopaedias and lexicons) published after the Second World War and analysed the encyclopaedic entries devoted to the category of cyclic musical composition. Such entries appear in 21 encyclopaedias – from among the total of 27 that I looked through – so it can be stated that the notion of a cyclic musical composition is quite popular in musicological writings[1]. Although particular reference books propose different definitions, several recurring ways of defining the term can be distinguished, as can also some typical understandings of cyclic composition in particular language traditions.

In the encyclopaedias the entries regarding the musical cycle take the form of a short definition or of a larger article; the entries proper are formulated as: *cycle*, *cyclic form*, *cyclic* (form, composition, etc.) or *cyclic principle*. It needs to be stressed that the understandings of these terms are often interrelated. In order to propose a theoretical description of these categories, we should mainly take into consideration those definitions which are similarly formulated in various reference books. In this way we will be able to establish the most common ways of understanding the cyclic principle in music. In the majority of encyclopaedias either the entry *cycle* or *cyclic form*, or both, can be found. This means that these two terms are the most important notions connected to our subject.

In most encyclopaedias, the term *cycle* is understood as a set or sequence (English *set* [5], *series* [18], *sequence*, *pattern* [16]; German *Gruppe* [20], French *ensemble* [13, 17]) of musical works or their consisting parts[2]. Already at this level of definition we see two types of understanding – the term *cycle* could describe either a series of separate, independent works (a cycle of musical compositions) or an individual, single work (a cyclic musical composition). Actually, these two ways of understanding the term are also found in musical practice, since we have, for example, both a sonata cycle and a cycle of etudes. The authors draw attention to the fact that a cycle should be performed together [18], they underline as well that the cycle is regulated by a linking compositional idea such as the same unchangeable cast in the whole cycle, a gradual complication of technical means utilised [14] or extra-musical titles [17]. However, opinions differ as to whether a cycle should be a joint musical substance or whether this is not necessary [13, 14, 18, 20].

The term *cyclic form* (sometimes also – *cyclic composition*) appears as the most important terminological category regarding on this subject in the reference books. The articles corresponding to this entry contain a lot of theoretical considerations such as describing the rules governing the presence of a cyclic idea in a musical composition. In the most common type of definition a *cyclic form* is a form in which repeated musical material appears in two or more parts of a composition [6, 9, 10, 16, 18, 21]. In a similar group of definitions the necessity of constructing the whole piece from essentially similar musical material is discussed. The authors [2, 3, 7, 8, 10, 17, 18, 19]

sometimes express the opinion that the most successful fulfilment of the idea of a cyclic form was achieved in the instrumental music of late romanticism. Typical examples are: *Symphonie fantastique* by Hector Berlioz (with its *idée fixe* present in all parts of the work) and, in particular, certain instrumental pieces by César Franck and Vincent d'Indy that are based on homogeneous musical material. In many lexicons the opinion can be found that the theoretical foundation of such an understanding of the cyclic form was proposed by d'Indy in the second volume of his treatise *Cours de composition musicale* published in 1900. In his description of the history of the sonata, d'Indy distinguished a separate category called the *cyclic sonata* (*la sonate cyclique)*. The construction of the cyclic sonata is regulated by repeated musical themes or motifs (*thèmes permanents, motifs conducteurs*)[3]. In d'Indy's opinion, a musical piece consisting of several parts – such as a sonata, string quartet or symphony – is not always a cyclic composition. On the contrary, it can become a cyclic composition only when it is wholly based on repeated motifs or themes that lead the integration of the piece as a whole. According to d'Indy, the themes in a cyclic musical work play the function of characters (*personnages*) in a literary work and a musical composition constructed in keeping with his rules can be compared to a "sound cathedral" (*cathédrale sonore*). These repeated motifs and themes of a cyclic work can be transformed in certain ways: rhythmically, melodically, harmonically. Thus, new sound qualities can be generated but the common motif cell (*cellule*), still present in every transformation of the initial theme, determines the coherence and integrity (*cohésion*) of the whole piece.

Although d'Indy's proposal can be regarded as the most thoroughgoing theoretical background of the cyclic form, a conviction often appears in the lexicons that tendencies towards cyclic forms were present in earlier stages of musical history – in the Renaissance (e.g. in the masses based on a single *cantus firmus*), Baroque (thematic relationships between particular parts of the works of Corelli, Handel, Vivaldi or J. S. Bach) or in the first part of the 19th century (Berlioz's *idée fixe*, Liszt's thematic transformations) [3, 10, 16, 18].

In the manner of defining of both terms – *cycle* and *cyclic form* – some differences can be found between particular language traditions. In the English lexicons, both the terms *cycle* and *cyclic* (*cyclic form*) are found [6, 16, 18] and the authors pay attention to the different understanding of these categories in English and French musicology. The English authors treat the cyclic form mainly (*in general sense*) as created by any series of following parts [5, 7, 9, 10] and they add that such an understanding is typical of English writings. However, they notice that sometimes the term cyclic form has a particular, specific sense, identified with d'Indy's ideas.

The French and Italian authors, on the other hand, are almost completely conditioned by d'Indy's treatise. In some cases, they identify the cyclic musical composition with such pieces whose musical form is created by related motifs and themes [1, 2, 3, 8, 12, 17]. It appears interesting that the Italian encyclopaedias do not include any musical entry connected to musical cycle; the idea of a cyclic work is described entirely in the entry *cyclic* (*ciclica*), understood as an attribute and used together with such words as form or composition [3, 8, 12]. It seems clear that the Italian musicologists use the term *cyclic piece* only where a coherent, integral composition is considered.

In contrast to the very similar ways of defining the idea of cyclic composition in various Italian and French lexicons, individual German encyclopaedias present very particular definitions of the musical cycle. However, many fundamental lexicons do not contain such terms as *cycle* or *cyclic form*; for example, we cannot find them either in succeeding editions of the Riemann-Lexicon or in the older version of the MGG (*Die Musik in Geschichte und Gegenwart*). Other encyclopaedias propose an understanding of the cyclic form that is completely different from English, Italian or French sources. The German authors define the cyclic form as being generated by an arrangement of succeeding parts [15] or identify it with a general rule of a settlement of parts within a multi-part musical piece [14]. It is curious to observe that prominent examples of this last case are not to be found in Franck's or d'Indy's pieces. On the contrary, the most typical model of the cyclic form is identified with the cyclic structure of the sonata in the classical era. The most extensive and comprehensive study of the musical cycle is presented in the entry *Zyklus* in the new edition of the MGG encyclopaedia [20]. In this entry by Ludwig Finscher various aspects and connotations of the term *musical cycle* are discussed.

The entries in question rarely appear in encyclopaedias written in other languages. The Polish *Encyklopedia muzyki* [19] defines the cyclic form as contrary to single-part form; it seems that the

cyclic form means the same as multi-part form. In the Russian *Enciklopedičeskij slovar* [11] cyclic forms contain more or less independent parts, as in the case of a cantata.

Sometimes the lexicons introduce original or even controversial understandings of the cyclic pieces. One may read in the *Harvard Dictionary of Music* [7] that looking for a coherence of motifs or themes in Beethoven's cyclic pieces is not adequate as "the idea as such was certainly foreign to him". *The New Grove Dictionary of Music and Musicians* [21] suggests that, in a strict understanding, a cyclic form is created when the initial musical material appears again in the last section of a composition. Surely such an opinion is borrowed from the very origin of the term *cycle* (Greek: *kyklos* = circle). Surprisingly, the author of the entry *ciclica* in *La Musica – Dizionario* [12] speaks of a cyclic structure in one-movement pieces such as fugues; the lexicon *Science de la musique* [13] confronts the cycle with such musical genres as the suite, sonata, or concerto: "That which contrasts the cycle with the suite, sonata, and symphony, is the constant presence of a certain literary or poetic idea" („Ce qui oppose le cycle à la suite, à la sonate et à la symphonie, c'est la présence constante d'une idée littéraire ou poétique").

The above-presented survey of encyclopaedia definitions reveals the variety and multitude of ways of understanding the cycle in music. As some definitions are similar in various lexicons and some of them are too controversial to be proper, it seems useful to propose here a methodological order that could improve the understanding of the subject in question. It seems that the lexicons supply three main aspects ruled by three fundamental terms:

- *the cyclic idea* – the general precondition that suggests the existence of an idea (rule) that sets in order consistent elements of a musical piece (or pieces); this precondition makes it possible to treat these consistent elements from the point of view of a unity or a whole;
- *the cycle* – a set or series of individual compositions joined together by a musical idea (e.g. a key relationship) or an extra-musical sense (e.g. subject matter in songs). In order to make it absolutely clear that the term *cycle* refers to several compositions (not to one!), I propose the term: "a cycle of musical pieces";
- *cyclic form* – a category covering the structure of an individual musical piece (not a cycle!). The term *cyclic form* is treated in the lexicons in two main meanings: (a) as a general outline of the movements, and (b) as a structure joined by a common musical element. For methodological precision, I propose replacing the term "cyclic form" with "a cyclic musical piece". The term *form* has various meanings – it can be identified both with a structure of a work and with its genre.

A more thorough analysis of the cyclic element in music leads to a further conclusion that can also be treated as a methodological proposal. From the theoretical point of view, the difference between a separate cyclic musical piece and a cycle of musical pieces is no longer important. A cyclic musical piece can be composed as a series of individual units (e.g. an opera as a series of airs, recitatives and ensembles; a symphony as a 3- or 4-movement series; a suite as a series of dances etc.). It would be strange to assume that the composers treat their particular symphony or opera as cycles of pieces; there is no known case in which each movement of a symphony could obtain a different opus number. On the other hand, a cycle of songs or preludes should be also treated as one piece (*opus*), although performances of separate songs or preludes (borrowed from a cycle) are possible as are also performances of one particular air from an opera or – less commonly – of one movement from a symphony or concerto. Musical tradition brings another argument for ignoring the difference between a cyclic musical piece and a cycle of musical pieces: in the 18th century a few (normally six) pieces were joined into sets that were sometimes called cycles as well. Since that time composers have been accustomed to give one opus number to several pieces that do not create a particular whole (e.g. Beethoven's chamber music; Richard Strauss's songs etc.).

In order to establish whether a musical composition is cyclic or not, we may look for the presence (or absence) of any musical element that ensures the coherence of the composition. According to this criterion, two types of musical works can be distinguished:

1. Compositions, whose particular movements/links/fragments are set together without applying the principle of integrity (or wholeness) of the piece or on the grounds of some conventional traditions (e.g. the four-movement classical symphony; prelude and fugue etc.). For these works no theoretical backgrounds regarding the cyclic element can be established – it is only possible to

describe various historical understandings of the musical cycle. Looking for a general idea must be limited to some general considerations such as the principle of contrast or variability.

2. Compositions based on the cyclic idea and revealing the presence of the integrity and wholeness of a musical cycle. Such a notion of the musical cycle could be found as early as in the works of Beethoven but its culmination – and also its theoretical background – was achieved in the above-mentioned treatise by d'Indy. The musical compositions of d'Indy and of his circle can even be treated as a peculiar hypertrophy of the very idea of a cyclic piece. At the same time, they are the most consistent manifestations of the compositional technique conditioned by the idea of the musical cycle.

References

1. *Larousse de la musique*, ed. by N. Dufourcq, vol. 1, Paris, 1957, p. 243 [*cycle, cyclique*].
2. *Encyclopédie de la musique*, ed. by F. Michel, vol. 1, Paris, 1958, p. 615 [*cyclique*].
3. *Dizionario Ricordi della musica e dei musicisti*, ed. by C. Sartori and F. Broussard, Milano, 1959, pp. 298–299 [*ciclica*].
4. *Collins Music Encyclopedia,* ed. by J. Westrup and F. L. Harrison, London, 1959, p. 173 [*cyclic*].
5. P. A. Scholes, *The Oxford Companion to Music*, vol. 1, London, 1960, p. 271 [*cyclic form*].
6. A. Jacobs, *A New Dictionary of Music*, London, 1961, p. 90 [*cycle, cyclic form*].
7. *Harvard Dictionary of Music*, ed. by W. Apel, Cambridge, 1961, p. 197 [*cyclic*].
8. *Enciclopedia della musica*, ed. by C. Sartori, vol. 1, Milano, 1963, p. 479 [*ciclica*].
9. P. A. Scholes, *The Concise Oxford Dictionary of Music*, London, 1964, p. 143 [*cyclic form*].
10. *The International Cyclopedia of Music and Musicians*, ed. by N. Slonimsky, vol. 1, New York, 1964, p. 477–478 [*cyclical form*].
11. *Enciklopedičeskij muzykal'nyj slovar'*, ed. by B. S. Štejnpress and I. M. Jampolskij, Moskva, 1966, s. 563 [*cikličeskie formy*].
12. *La Musica. Dizionario*, ed. by G. Gatti, vol. 1, part II, Torino, 1968, p. 404 [*ciclica*].
13. *Science de la musique*, ed. by M. Honegger, vol. 1, Paris, 1976, p. 275 [*cycle, cyclique*].
14. *Das grosse Lexikon der Musik*, ed. by M. Honegger and G. Massenkeil, vol. 8, Freiburg, 1982, pp. 422–423 [*Zyklische Form, Zyklus*].
15. F. Hirsch, *Das grosse Wörterbuch der Musik*, Berlin, 1984, p. 530 [*Zyklische Form, zyklisches Prinzip*].
16. *The New Harvard Dictionary of Music*, ed. By D. Randel, London, 1986, p. 218 [*cycle, cyclic form*].
17. *Dictionnaire de la musique*, ed. by M. Vignal, Paris, 1987, p. 208 [*cycle, cyclique (forme)*].
18. *The Oxford Dictionary of Music*, ed. by M. Kennedy, Oxford, 1993, p. 178 [*cycle, cyclic form*].
19. *Encyklopedia muzyki*, ed. by A. Chodkowski, Warszawa, 1995, p. 173 [*cykliczna forma*].
20. *Die Musik in Geschichte und Gegenwart (MGG). Sachteil*, ed. by L. Finscher, vol. 9, Kassel, 1998, pp. 2528–2537 [*Zyklus*].
21. *The New Grove Dictionary of Music and Musicians*, ed. by S. Sadie, vol. 6, London, 2002, pp. 797–798 [*cyclic form*].

Notes

[1] The list of encyclopaedias is placed at the end of this text.
[2] The numbers in square brackets correspond to the entries on the list of encyclopaedias.
[3] V. D'Indy, *Cours de composition musicale.* Vol. 2, part I. Paris, 1900, chapter 5: *La sonate cyclique*, p. 375–433.

Santrauka

Ciklinės muzikinės kompozicijos teorinės perspektyvos

Siekdamas nustatyti, kaip muzikos teorija apibrėžia ciklinės muzikinės kompozicijos kategoriją, autorius išnagrinėjo muzikinio ciklo apibrėžimus 27 informaciniuose žinynuose (žodynuose, enciklopedijose), išleistuose po Antrojo pasaulinio karo. Nors skirtingose kalbose (vokiečių, anglų, lenkų, rusų, prancūzų, italų, ispanų) sąvokų definicijos skiriasi, kai kurios kategorijos, tarp jų „ciklinė struktūra" ir „ciklinė kompozicija", yra panašiai apibrėžtos daugelyje žodynų.

Pagrindinis faktorius, nusakantis muzikos kūrinio cikliškumą, yra tas, kad kūrinyje yra (arba nėra) ciklą vienijančių muzikinių elementų. Vadovaudamasis šiuo kriterijumi, autorius nustatė du muzikos kūrinių tipus: 1) kūriniai, kurių atskiros dalys jungiamos netaikant vientisumo principo; 2) kūriniai, pagrįsti cikliškumo principu.

Margarita Katunyan

Cycle: Semantics and Principal Types
of Its Structural Realization

Cyclicity is the fundamental principle of thinking which may be characterized as a simultaneous combination of *multiplicity* and *unity*. It gives rise to the various ways of structuring time and space, both virtual and physical. It underlies the diversity of musical forms inherent in different historical periods, each offering specific mechanisms of their interaction relevant exclusively to the given times. Let us analyze the following three types of cyclic arrangement – the principles of series, agon and circle. These basic principles infuse both archaic folklore and professional art throughout the history of its development up to the present day.

Olga Freidenberg, a researcher of myths and rituals, while analyzing the sources of literary plots and genres in the structure of archaic rituals and in their semantics[1], points out that although *archaic thinking rests upon the sole category of identity*, it develops in the various concrete ritual forms and mythological plots. And even though Freidenberg's line of research is literature and theatre, the underlying ideas of her book are significant not only for them since we can clearly distinguish the prototypes of musical forms in the rituals described there. The analysis of structural logic in modern music reveals regularities reducible to the same ancient structures. Below we are to deal with these ritual structural archetypes.

SERIES represents a succession of identical units. Each unit in this series does not constitute an element of the entity, being self-sufficient and *identical to the entity*. A series implies the continuum of both time and space. This principle is universal and it pertains to the most ancient structural archetypes of human thinking. A train of units similar in meaning and form reflects the periodic, cyclic structure of being, the cosmic order in the perception of both archaic and modern man. Its simplest forms are still living in traditional cultures, folklore and in a dynamically developing civilization. The series principle can be found everywhere: in the Old Scriptures and modern poetry, in the Greek meander ornamental pattern and the Celtic knitting, in folk matreshkas (wooden dolls shaped like egg with successively smaller ones fitted into one another symbolizing the succession of generations)[2] and in invocations (summons, lamentations, dirges, etc.), in the church litany and hagiographic icons, in the rosary and organum of the Notre-Dame school, in dictionaries and encyclopedias, in catalogs and calendars, in the book pagination and scrolls (as in computer text), in exhibitions and serial films, in codes and registers, and in children's counting verses and games. It is all based on the open progression of identical units. The open nature of a series epitomizes the infinity of being. A series is the metaphor of growth, division, ramification and reproduction, representing space development and a model of the expanding universe.

AGON is a contest, the metaphor of struggle, a dialogue; the binomial structure of opposition[3]: day and night, the beginning and the end, good and evil, male and female. In rituals the binary principle regulates space according to the symmetry law of opposites. In the old Greek theatre you have two semi-choruses: strophe/antistrophe; in philosophical treatises a dialogue takes the question/answer form. The regulating law of binary oppositions is applied in logics (the unity and struggle of opposites), rhetoric, and poetry. The agon structure represents *a series of binary cycles*. It is open and continual like a series and in fact represents its parallel modification. In the Greek tragedy the metaphor of struggle acted as a dramatic technique of "peripeteia". As Freidenberg writes, "Peripeteia is an inevitable result of primitive thinking unfolding in cycles, <…> primal dialectical concepts of rounded time and rounded space. This harmony is attained through the meeting and struggle of opposing forces; the catastrophe and ruin end with the reversal to rebirth"[4].

To illustrate the agon principle in medieval poetry, we can refer to the rondeau by Guillaume de Machaut "My end is my beginning" with its refrain "My end is my beginning, /And my beginning is my end". Here the opposition principle acts both within each line and between the two lines. The inversion of words, end/beginning and beginning/end, and their identity encircle the meaning of death and rebirth. The metaphor of a ring is expressed by Machaut in the musical

structure as well: in addition to the form of rondeau (triolet), the two above lines make up palindrome, a mirror-like opposition/identity of one and the same structure: *versus* and *retroversus.*

CIRCLE implies the total set, used as a metaphor to express the complete and harmonic structure of the Cosmos. A circle encompasses EVERYTHING. It is embodied in a roundelay, or colo[5]. The word "chorus" has two meanings: a circle and the totality of everything. A circle and a square fitted into it (modification of a circle) form up the figures of the Buddhist mandala, which is explained by M. Eliade as *imago mundi*: "the concurrent representation of both the Cosmos in miniature and the pantheon. Its construction corresponds to the magical rebuilding of the world"[6]. The closeness of a circle is identical to openness since the integrity of a roundelay does not depend on the number of participants. Cyclic continuality, repetitiveness, circular movement, and refrain recurrence act as a metaphor for the eternity of being. In this case identity also acts as the structural fundamental principle in presenting a series of cycles.

A cycle based on the series principle
This line of cyclic forms originates in invocation expressed according to the formula of an interjection, a word or a brief phrase and its repeated reiteration or variation. Here mention should be made first and foremost of textual-musical forms. Psalmody is a set of formulas used in the singing of psalm tones and recurring psalm stanzas (in the repetitive manner). In the Gregorian chant its deep-rooted linkage with invocation retains the formula-based (combinatory) structure of an antiphon. Organum of the Notre-Dame school rests on *cantus firmus*, where each tone is used as a basis for extended polyphonic constructs so that the entity is structured by the cantus tones repeated part upon part, i.e. in a series. The segmented cantus motet dating to the 16th century represents a series of polyphonic arrangements of each cantus segment taken separately, which constitutes the motet principle of composition. On a par with the motet, there exists the couplet type of textual-musical forms as the simplest manifestation of a series based on the repetitiveness of music and text alterations.

The idea of circle. Refrain (ritornello) forms
This mode originates in a roundelay. Refrain forms are simple because a succession of their parts is easily discerned and predicted. The cyclicity of renewals and repetitions makes it possible to predict the rhythm and contours of this form. As compared with the through motet following a word, the refrain form reveals its ritual, playing basis. The succession of alterations and repetitions stems from neither text nor music but from action merging all together in a syncretic entity. Such forms took shape at the turn to the 17th century. The character of refrains, often in the form of *tutti*, scanning and rhythmically dynamic, suggests the involvement of a third component, that is, collective singing-action, movement in space. Finally, the recurring alteration of varying parts generates an exchange, a verbal, musical, and spatial plastic dialogue between them. It contains rituality, an element of a game, and theatricality. The latter was highly topical for those who lived in the early 17th century and believed that all the world was a stage. It is already not so much a ritual itself as playing a ritual, its representation turning into a kind of musical scenic performance and later, as we'll see, into an autonomous musical form.

The diversity of genres in refrain form, such as mass, motet, concerto, concert madrigal, opera, and oratorio, reveals the numerous sources used to nourish it, and in the final analysis, its archetypical nature.

Archetypes
The appeal to human perception is in fact a call for anthropological memory keeping the ritual structural archetypes encoded in the human mind. Their transition into proper musical forms makes them archetypical. The refrain form goes back to sacral structures of archaic thinking and rests on all the three forms of identity: series, agon and circle. A circle and a roundelay express the harmony of the universe by musical and plastic means. A round dance acts as a metaphor for the complete, all-embracing nature of both space and time, as a structure expressing the principle of *a systemic set*, its total vitality and ordered regulation: the cyclic nature of being, a constant flow of life in nature, human existence and social environment. A circle organizes the space of ritual actions, processions, roundelays, games and children's counting verses. It is based on the category

of identity that excludes linear, cause-and-effect relationships. In secular practice it pertains to all the forms of medieval lyrical poetry stemming from a dance[7]: old French ballades, rondeaux, virelai, carole round dances, and the Italian villanella. The ecclesiastical forms and spiritual genres included antiphons, responsories, litanies, Magnificats, medieval English carols, etc.

Taking the circle archetype as a principle of proper musical forms makes them paradigmatic owing to their most varied development assuming in each case the features typical of a given period. The Renaissance and Baroque refrain forms were typified owing to the historically preconditioned interaction of series, agon and circle archetypes. The series archetype realized in a succession of identical units, such as strophes, stanzas, and couplets, also assumed their derivative form of *basso ostinato,* a new, proper musical form, often blended by Monteverdi with the refrain pattern (these two cyclic types are easily combined). The agon principle realized through a dialogue, conflict, contrast, and symmetry turned into a symbol of the Baroque style. In the concerto it projects the ritual binary character on the mode of playing, and the binomial structural code on all the parameters of musical language: strophe and ritornello, retort and echo, theme and response, piano and forte; vocal and instrumental, solo and tutti, left- and right-sided choruses, male and female voices, recitative and cantilena; perfect 3/1 and imperfect 2/2 tempi; horizontal and vertical types of facture (similar to arch spans and columns).

Among the refrain forms used in the early and mid-17th century, we can distinguish two principal divisions: (a) *strophic (couplet) songs* with refrains (ritornellos), which became the prototype of couplet rondeau (classicist tendency prevailing in France) and (b) *strophic imitation forms, i.e. motets* with refrains (ritornellos). We offer to term them as *refrain motets.* The latter gave rise to the concerto form of the Baroque period and other ritornello forms (prevailing in Italy and Germany)[8].

In the 20th-century art, along with the decline of a narrative element, structural models of nonlinear thinking came to the surface, reflecting the conception of new times, man, opus, author and culture and shaping a different type of form production as compared with the narrative art of the 19th century. In the 20th-century painting and graphic arts the cyclic principle is most noticeable in pop-art. For example, the series archetype (combinatorics) in the works of its leader Andy Warhol came to be used for defining their meaning and form. The same can be said about modern conceptual poetry where structural codes appear to shape new relations and meanings. Let us consider just one example.

Lev Rubinstein

And I'll come to him. And I'll say: "Give him to me. Do you need him?
Give him to me. For you have no need for him. Give him to me. But I do. Give".
And he will say: "All right, take him! I don't need him. Well, take him. You need him. Take".
And I'll take him, and I'll do what should be done.

And I come to him. And I say: "Give him to me. Do you need him?
Give him to me. For you have no need for him. Give him to me. But I do. Give".
And he says: "All right, take him! I don't need him. Well, take him. You need him. Take".
And I take him, and I do what should be done.

And I've come to him. And I've said: "Give him to me. Do you need him?
Give him to me. For you have no need for him. Give him to me. But I do. Give".
And he has said: "All right, take him! I don't need him. Well, take him. You need him. Take".
And I've taken him, and I've done what should be done.

This poem represents a purely cyclic construct based on the concept of *time trinity* – the future, present and past. Recounting an episode from the gospel about Joseph of Arimathaea and Pontius Pilate, it rests upon not only on the canonic plot but also on the number 3 as its concept, structure and symbol. This poem about a ritual is also executed as a ritual. Its condensed syntagmas reveal a keen attitude to the rhythm of successive events in the gospel text: "This man went unto Pilate, and begged the body of Jesus; and he took it down, and wrapped it in linen, and laid it in a sepulcher" (St. Luke, 23: 52–53). This poem includes all the three structural codes. The series of invocations in the form of woes-queries "give me" are organized by rhythmic periods, which

creates the sensation of pressure, perseverance and at the same time of strict dancing pace. The agon involves a thrice-repeated dialogue intensified by three oppositions: "to you – to me", "you have no need – I do need", and "give – take". Finally, the rotation and complete span of times is expressed in the ternary form of the cycle and in the thrice-repeated refrains "Give him to me!" and "Take". Hence the structure is deeply rooted in ritual roundelays, invocation woes and funeral contests (See: Homer. *Iliad*. Chant 23, Patroclus's funeral).

The examples from modern music may be illustrated by the two compositions in classical minimalism: Terry Riley's *In C* and Steve Reich's *Piano phase*. Their principal features are compared in the following chart:

Figure 1

Terry Riley. *In C*	Steve Reich. *Piano phase*
53 patterns – the series principle Repetitiveness – a series Infinite canons in each pattern – the circle principle	Repetitiveness with rhythmic divergence and convergence – a circle. Repetitiveness – a series. Three patterns in 12, 8, 4 tones – the series principle

Terry Riley. *In C*

It is interesting to draw a parallel between music and a similar phenomenon in the movies. The series principle found its visual interpretation in Godfrey Reggio's *Koyaniskatsi* (1982), capturing on film the two-hour composition by Philip Glass. The American director, venturing to delineate the conception of *minimal music*, produced an "absolute film" – without a plot, dialogues and protagonists. The world is seen by the objective motion-picture camera showing a modern megapolis, a stream of cars and people, the flashing of faces, houses, shop-windows, and escalators; featuring the pictures of creation and hi-tech, social and ecological disasters... The race of life is emphasized by either rapid shooting, a kaleidoscopic frequency of motion pictures or by the rhythm of mechanically repeated processes, while the director's contemplating eye is presented by the motionless camera. The outsider's watch over the continuity of pictures perceives marking time. Therefore, statics and silence represent the perception of time and the atmosphere conveyed by Philip Glass through his minimalist repetitive *non stop* music.

13

Concept as the super idea of a syncretic entity

The super idea is an extra-musical concept assigning a specific meaning to the musical structure. This idea determines its individuality, either superseding typical schemes or modifying them. The super idea of a cycle took shape originally outside music: in the mass, other rituals, in the form of prayer reading during the divine service. In secular music-making these ideas are rooted in public ceremonies. Another prototype (a series of dances, i.e. a festive event in everyday life, including music only as one of its components) is realized in the suite, divertimento, etc.

Yet, there are particular concepts. For example, the eight psalm tones make the basis for cycles of eight Magnificats, each representing a *series* of strophes, i.e. a cyclic entity (John Dunstable, Ludvig Senfl, Palestrina). The tradition of Magnificats gave rise to cycles of pieces in all the modes – eight and, later, twelve tones (Andrea and Giovanni Gabrieli, Cabezon). Herefrom the way was paved for the cycles of preludes and fugues in all the keys, e.g. *Wohltemperiertes Klavier* by Bach and his followers among the 19th and 20th-century composers.

In respect to the concept it is worth comparing the two works that appeared concurrently but independently of each other at the end of the 20th century. Both compositions were written by Algirdas Martinaitis and Vladimir Martynov on the poetic text of St. Francis of Assis. In spite of striking differences in their musical language and structure, "rounded" time and space in these works are modeled after structural archetypes.
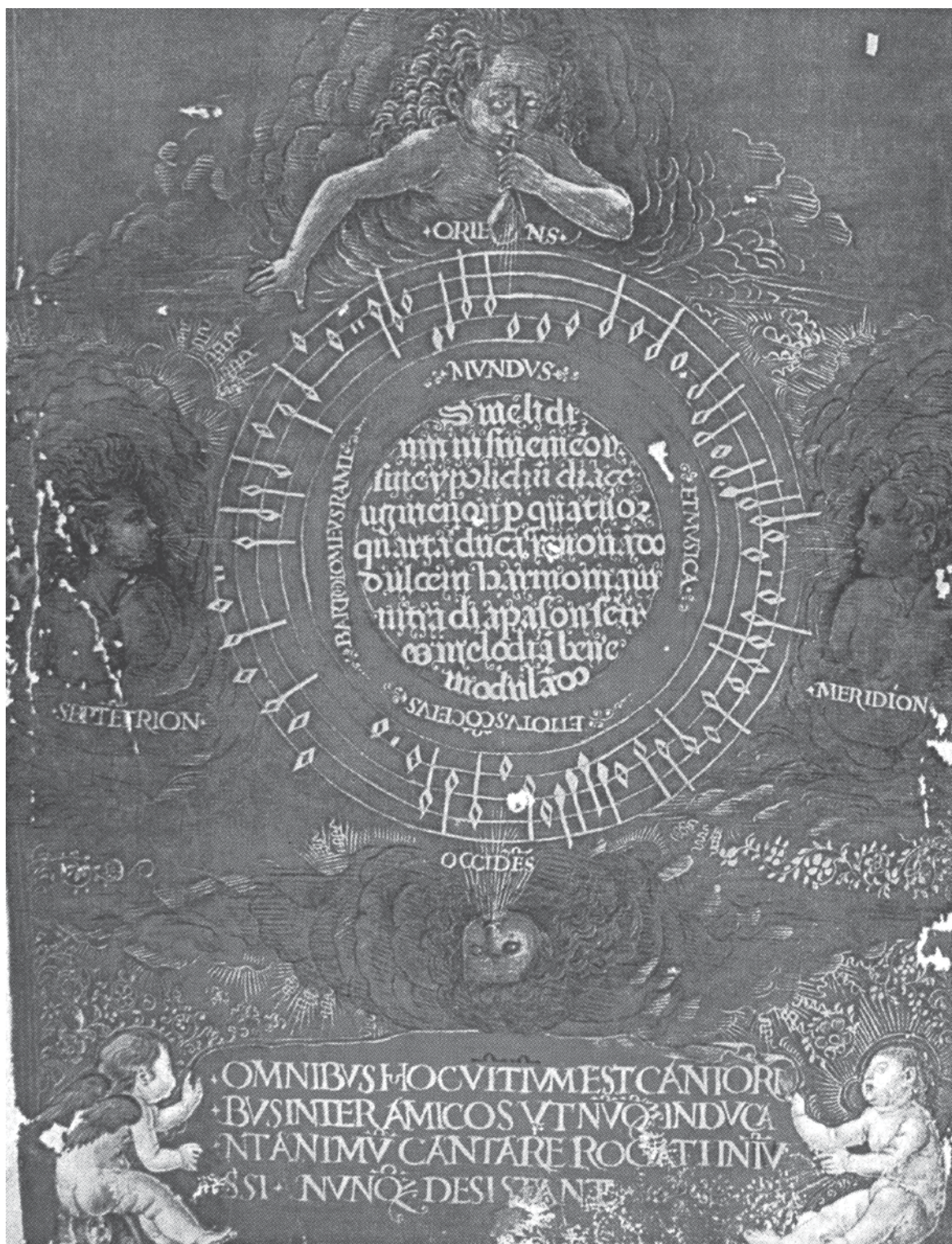
Figure 2

| Algirdas Martinaitis. *The Canticle of Brother Sun by St. Francis of Assis*. 1996	Vladimir Martynov. *Canticum fratris solis.* 1996
Strophic structure	Strophic structure
Refrain pattern	Refrain pattern
Repetitiveness of the block: Psalm-antiphon	Repetitiveness of the block pattern: Hallelujah-psalm-antiphon
Catholic singing tradition: The same psalm line as in litany	Catholic composition tradition: 8 psalm tones
Music alteration in each strophe and a recurring refrain line. Folk tradition, birds' singing, Pärt, Messiaen, John Tavener (Orthodox singing). The composer stresses their inner community	Material is not repeated but identical in meaning, growing through and therewith renewed according to the addition principle, i.e. systemic augmentation of the series: from one up to eight units
Tradition – refrain motet	Tradition: medieval cycles of Magnificats based on the psalm tones
Lithuanian language	Umbrian dialect (in the original 13th-cent. medieval Italian)
Folklore constituent: *kankles, sutartine*	Folklore constituent: medieval archaic music, ethno-Christian tradition, Syrian, Coptic singing. No quotations
Allusions to favorite contemporary composers kindred in spirit – Arvo Pärt, ("Fratres"), Messiaen, Tavener	Allusions to favorite composers, "gurus" from the past – Christian archaic music, the Flemish school, Ockeghem (addition technique), the Venetian Renaissance of St. Mark Cathedral, Monteverdi
Combination of the series principle and refrain pattern	Series principle and refrain pattern: The series pattern perceived throughout as refrain. Cyclic circular progression
The concept of ritual	The concept of number 8 as a symbol and structure. Ritual
Reproduction of authentic Lithuanian folklore: folk voices, the sounds of *kankles*	Authentic performance of the Renaissance style (delivered by the British tenor Mark Tucker)
Authentic composition: Pärt's style reproduced without quotations	Authentic composition: original formulas of psalm tones and their traditional chanting of the poetic text by St. Francis. Authentic allusions to Monteverdi's music without quotations

Conceptual notation

Structural archetypes in notation bear out a new paradigm of thinking sometimes to no lesser extent than music itself. The notation of Terry Riley's *In C* reveals the nonlinear principle of composition arranged according to the series principle. The graphic representation of a circle is deeply rooted in the medieval and Renaissance tradition of musical notation. The infinite canon in Ramos de Pareja's *Enigmatic Canon* (15th century) is notated in the shape of a circle.

**Figure 3.** Ramos de Pareja. *Enigmatic Canon*

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In modern music the graphic representation of a circle is also quite frequently employed, e.g. by Edison Denisov in *Birds' Singing* (1969), and George Crumb in *Ancient Voices of Children* (1970), *The Magic Circle of Infinity* (1972) etc.

Figure 4. Edison Denisov. *Birds' Singing*
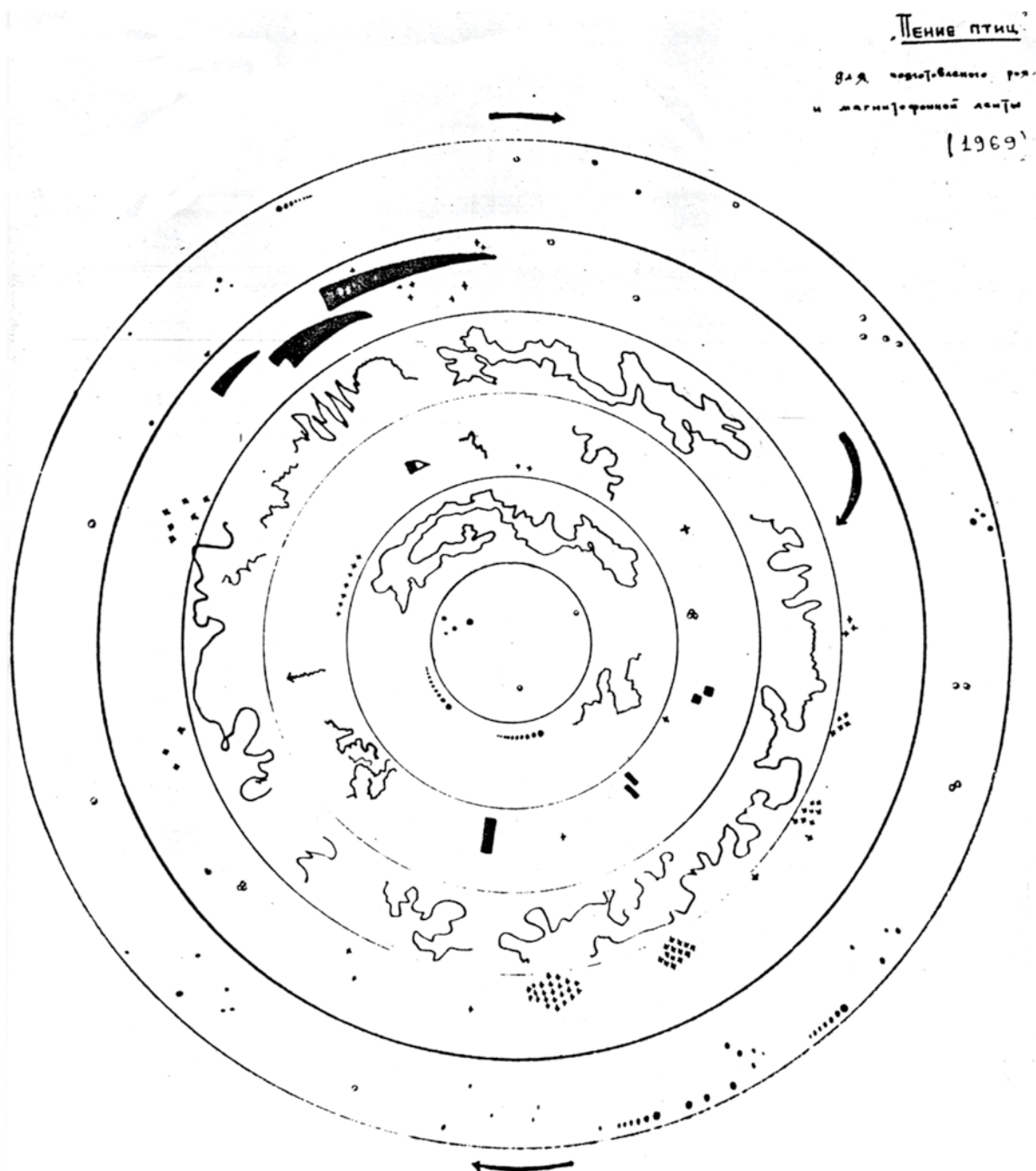
Another example is Eduard Artemyev's incidental music to the film *Solaris* (1969), produced by Andrei Tarkovsky.

Figure 5. Eduard Artemyev. Music to the film *Solaris*
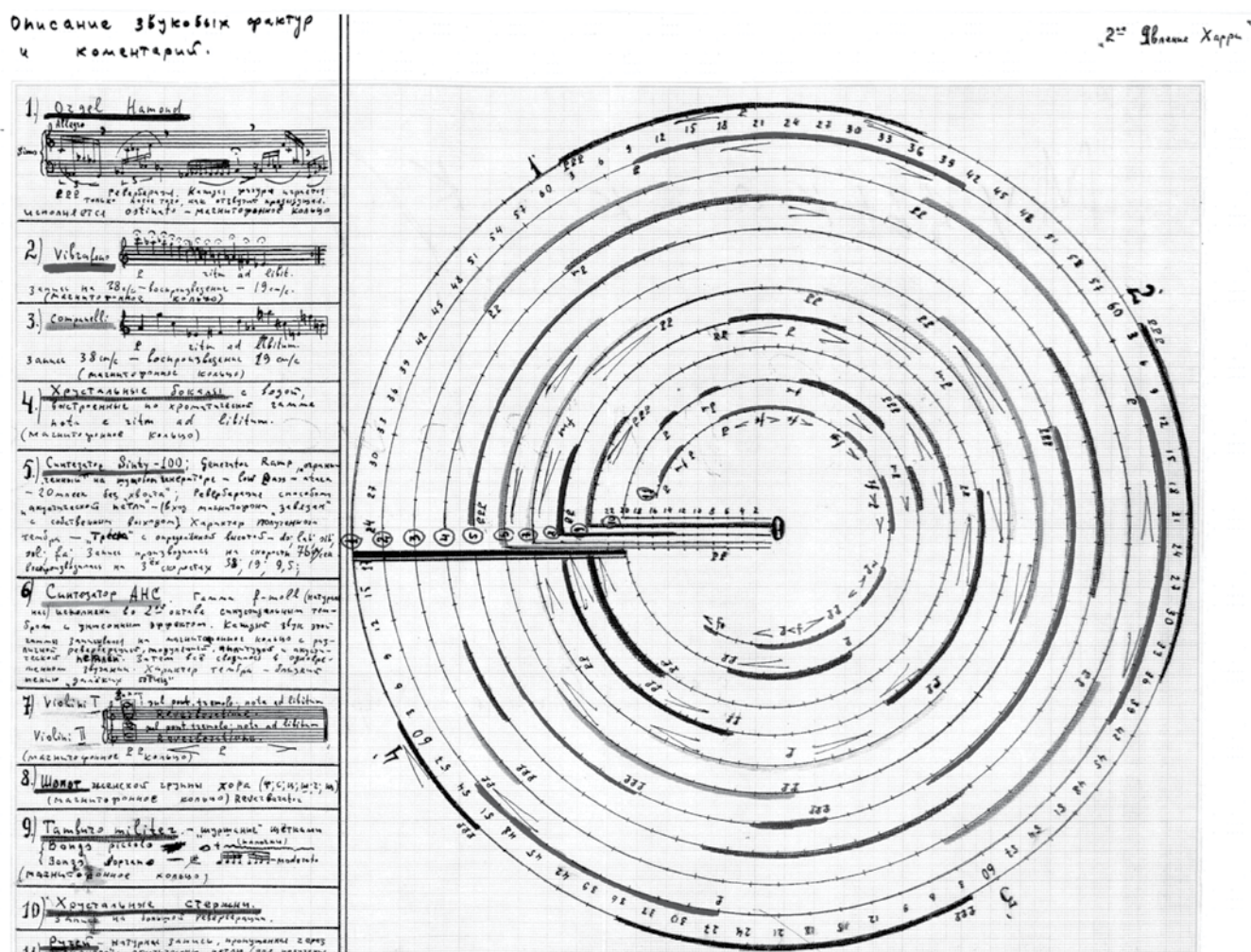
It is worth mentioning the composer's commentary on the episode entitled "Harrie's Second Appearance". Eduard Artemyev: "Music is ringing in the dream episode. Graphically, the score is drawn in the shape of a circle offering a diagram for the introduction of different orchestral parts. I've chosen a circle because otherwise a linear horizontal outline of the score would have taken too many sheets. In my case it takes only one sheet <...> A circle is used as a substitute to show infiniteness, so that at a glance you can see all at once, where and what is going on."[9]

Notes

[1] *Фрейденберг О.* Поэтика сюжета и жанра. Москва, 1997. [*Freidenberg O.* The Poetics of Plot and Genre. Moscow, 1997].

[2] Matreshkas – derived from "matron", "mater", "mother". Cf., also "matrix".

[3] См.: *Леви-Строс К.* Мифологики. Сырое и приготовленное. Москва, 2000. [*Levi-Strauss C.* Mythologies. The Raw and the Prepared. Moscow, 2000].

[4] Фрейденберг О. [*Freidenberg O.*] Op. cit. P. 163.

[5] See: Коло, Круг, Хоровод // *Даль В.* Толковый словарь живого великорусского языка. [Colo, Circle, Roundelay // *Dal' V.* The Defining Dictionary of the Living Great Russian Language]. According to Dal', a circle is a hollow circumference (colo – ring), flat surface within this figure and a sphere (a round piece of cheese). Hence *kolobok*, a round loaf.

[6] См.: *Элиаде М.* Аспекты мифа. Москва, 2000. С. 30. [*Eliade M.* The Aspects of a Myth. Moscow, 2000]. С. 30. Jung defines a circle with a square (rhomb, cross) fitted into it as "mandala". See: *Jung C.G.* Geheimnis der Goldenen Blüte. Cited from: *Аверинцев С.* «Аналитическая психология» К.-Г. Юнга и закономерности творческой фантазии // О современной буржуазной эстетике. Вып. 3. М., 1972. С. 149. [*Averintsev S.* C. G. Jung's 'Analytic Psychology' and Patterns of Creative Fantasy // On Modern Bourgeois Aesthetics. Issue 3. Moscow, 1972]. P. 149.

[7] For the dance roots of "lyrical forms" such as ballades, rondeaux, and virelai see: *Шишмарев В.* Книга для чтения по истории французского языка. М., Л., 1955. С. 360. [*Shishmarev V.* A Book for Reading on History of the French Language. Moscow-Leningrad, 1955. P. 360].

[8] See: *Катунян М.* Рефренный мотет в истории концертной формы // Юрий Николаевич Холопов и его научная школа. Москва, 2003. [*Katunyan M.* The Refrain Motet in the History of the Concerto Form // Yuri Kholopov and his scientific school. Moscow, 2003].

[9] Interview with Eduard Artemyev.

Santrauka

Ciklas: semantika ir pagrindiniai struktūrinio realizavimo principai

Cikliškumas yra vienas iš pagrindinių mąstymo principų, kurį galima apibūdinti kaip atskirybės ir bendrybės idėjų vienalaikį derinį. Šis derinys generuoja begalinį kiekį laiko ir erdvės (ir virtualios, ir fizinės) struktūrizavimo metodų. Juo pagrįsta visa istorinių epochų muzikos formų įvairovė, o kiekvienai epochai būdingi tik tuo laikotarpiu aktualūs formų sąveikos mechanizmai.

Pranešime nagrinėjami du ciklo tipai – eilės principas ir rato (t. y. ciklo) principas, taip pat ir jų semantika. Šie du tipai paplitę ir archajiškame folklore, ir profesionaliojoje muzikoje nuo pat senųjų laikų iki šių dienų.

Cikliškumo principo struktūrinio realizavimo tipai:

1. Eilės principas. Šis tipas kilo iš invokacijų: folkloro, Notre-Dame mokyklos organumo, segmentuoto *cantus firmus* moteto, magnifikato ir iš jo kilusių ciklų, Naujųjų laikų ciklinių formų. Šiuolaikiniai pavyzdžiai: T. Riley'io „In C", V. Martynovo „Apokalipsė", „Canticum fratris Solis".

2. Rato principas. Refreninės (riturnelinės), reprizinės formos. Šis tipas kilęs iš folklorinių ratelinių šokių, responsoriumų, antifonų, litanijų, senovinių prancūziškų rondo, anglų kalėdinių giesmių, vilanelų, Renesanso ir baroko refreninių motetų, baroko riturnelinių formų, penkių rondo formų. G. de Machaut „Rondeau", G. Gabrieli koncertai ir kanconos, Monteverdi motetai. Šiuolaikiniai pavyzdžiai: St. Reicho „Piano Phase", A. Martinaičio „Šv. Pranciškaus giesmė saulei, arba Kūrybos šlovinimas".
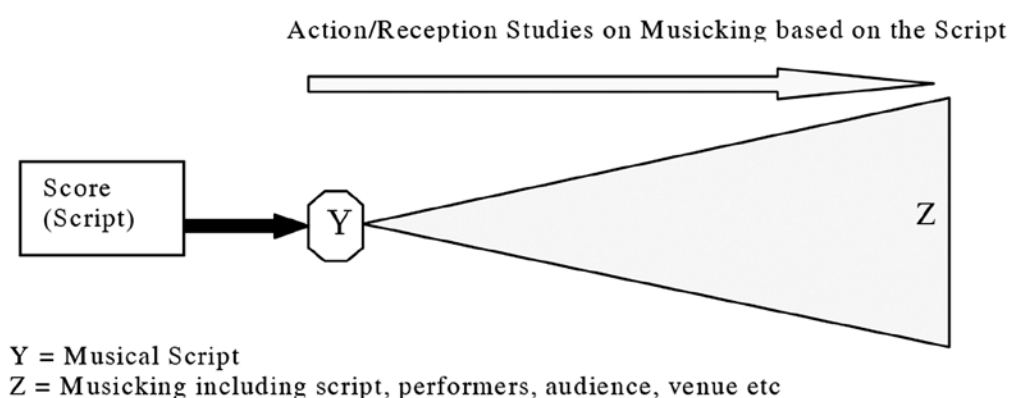
3. Konceptas kaip sinkretinės visumos superidėja.

Ian D. Sutherland

Composition as Musicking:
Habitus, Agency and Composer Construction/Re-construction of Social Reality

Western art music is a literate tradition; its study focused on literacy, developing philologically. A prime detractor of this has been the separation of its social nature and institution of an ardent individualism and impenetrable mysticism around its creative processes. Consider the mythology surrounding Beethoven as proto-typical creative genius and cultural icon in light of DeNora's (1995) *Beethoven and the Construction of Genius: Musical Politics in Vienna, 1792–1803*, or what Busoni expressed in 'Theory of Orchestration' (1905), 'The Future of Opera' (1913), 'The Oneness of Music' (1921). Schönberg, ever reminded of public reaction to his music wrote 'My Public' (1930) and there is Babbitt's famous essay, 'Who Cares if You Listen' (1958). Obviously social interaction is integral to what composers do, let us consider this importance.

Christopher Small (1998) brought the idea of musicking to the fore, situating music as an act, not a thing; defining it in its performative process not in the score. Nicholas Cook (2003) tackled this issue in his article 'Music as Performance'. Cook showed how a text based approach situates music as belonging to appropriate written material, not as sonic manifestation in real time. Using ideas from theater studies he moved from philology focused musicology to performance focused musicology where music includes its social context; where the score is only one part of the overall event joined by the sonic world it appropriates and the social context in which it is performed. Cook pulls this together with the idea of musical 'script', a term affording discourse about the serial plan for real-time social interactions (206). According to Cook the best approach is to study the action and reception of music, understanding it as a social phenomenon. Cook considers how performing musicians *music[k]* with a script. The process is then the actuation of a composer(s)'s/arranger(s)'s pre-extant set of instructions through social activity. Graphically represented we can consider the direction of the study:

Figure 1

Action/Reception Studies on Musicking based on the Script

Score (Script) → Y → Z

Y = Musical Script
Z = Musicking including script, performers, audience, venue etc

This idea of reception studies has garnered much interest and has proved most useful. What it does not study is how the script came to be? What if we look at the composer as social actor in a similar way as action/reception studies look at the performance as social action (see DeNora, 2002)? How did the composer musick to create the script and how is this musicking, the compositional process, mediating society? This would mean conceptually cloning a mirror image of the above diagram:

Figure 2

X = Composer musicking
Y = Musical Script
Z = Musicking including script, performers, audience, venue etc
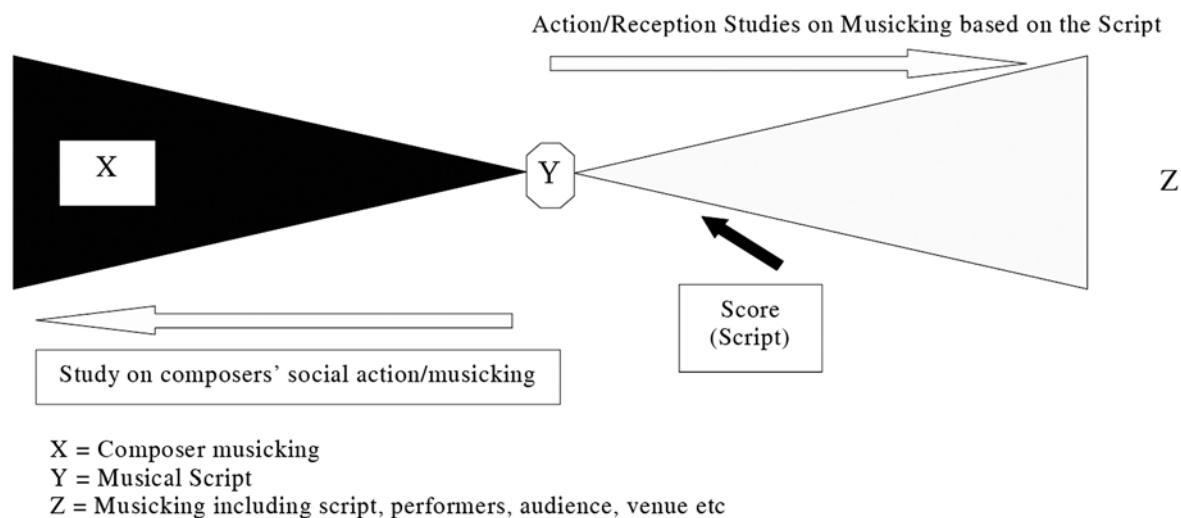
The compositional process has long been steeped in mysticism, dependent on romantic discourse. Jason Toynbee discerns three main elements of this concept; the creative process is solipsistic, creation is in many respects involuntary, composition occurs in stages from new idea to definite form (2003, pp. 103–104). Surrounding this is the idea of creator/genius existing on some higher plane or the receiver of divine intervention.

This view of the creative process, and the individual engaged in it, places composers outside the realm of the social world, ideology antithetical to reality as we are all born into society. I suggest we turn to the sociologists Giddens, Bourdieu and Becker, to consider the composer as social actor, or more broadly, social agent. We are all social agents – having the potential to act. When we act as social agents we are both producing and re-producing action, and doing so through shared or 'mutual' meanings. Social action is, even if unintentionally, recursive (Giddens, 1984, p. 2). Consider the case of language. As we speak or write in a grammatically correct way we are both acting socially by communicating and also reproducing and substantiating our language – maintaining social continuity. Music is much the same way. As a composer writes in a certain way he or she is both producing and reproducing social action. The way in which he/she writes reproduces the traditions of composition from their experience but also has the potential to transform those experiences and traditions into something novel, original. This recursive nature of action which supports social continuity, in the Durkheimian sense, is both constraining and enabling. It gives us a framework on which to work, to perceive reality, but also provides the tools for elaboration and innovation. As social agents we are also reflexive in our knowledge. We continuously survey our own social realities in reference to our actions and we expect that others do this too. Not only do we survey actions but we survey physical and social aspects of the contexts in which we act (Giddens, 1984, pp. 3–5). Very crudely then, we are all social agents with the potential for action. As we enact that potential in time and space through social interaction we continuously survey our actions and their results and are working from the premise that everyone else does so. In addition to the activity of ourselves and those around us we consider the physical and social aspects of the contexts in which we operate and through action we intentionally or unintentionally re-create continuity and structure.

Pierre Bourdieu, well known for his theory of *habitus*, which I will come to, has illuminated, as pointed out in Anthony King's 'Thinking with Bourdieu Against Bourdieu: A Practical Critique of the Habitus' (2000), the idea of practical action by social agents, what King calls 'practical theory'. King picks up on Bourdieu's idea of individuals being *virtuosic social agents* (Bourdieu, 1986). Social agents, at this point in Bourdieu's thinking, are not dominated by abstract, objective

social principles, as can be seen in Giddens structuration theory and Bourdieu's own habitus. Rather, because they understand their social realities, their *scripts* – note the similarity with Cook, they are able to make changes, improvise and elaborate on the script. In this 'practical theory' judgment falls not on how well an individual follows pre-extant rules, but on how appropriate an agent's actions are perceived by those with whom he/she acts, in a negotiation based on shared or 'mutual' knowledge. This is subjective judgment in a temporary manner, not something eternally fixed. It is these temporary negotiations that allow for "'fuzziness'" – change. Since individuals are embedded in society from birth and everything they learn comes from other social agents, all actions are social actions. Bringing this together we can conceptualize our actions as part of a repertoire operational in a cultural horizon. The borders of the horizon are 'fuzzy' and as our life careers progress the horizon in which we work moves, it is not objective and fixed (King, 2000, pp. 419–421). For composers the progression of life careers is all important for stylistic characteristics. Each individual is going to have, to a lesser or greater degree, a unique life career of social interaction. From birth no two people will have the same set of social interactions as any other person. This affects our repertoire of social actions and makes each fuzzy horizon unique.

Turning now to Bourdieu's notion of habitus – simply put it is all those things that make up an individual's social world from socio-economic reality to beliefs to dispostions of all sorts which comprise shared knowledge between individuals in a wider social context. Bourdieu claims:

> 'The conditionings associated with a particular class of conditions of existence produce the habitus, systems of durable, transposable dispositions, structured structures predisposed to function as structuring structures, that is, as principles which generate and organize practices and representation' (1990, p. 53, quoted from King, 2000, p. 423).
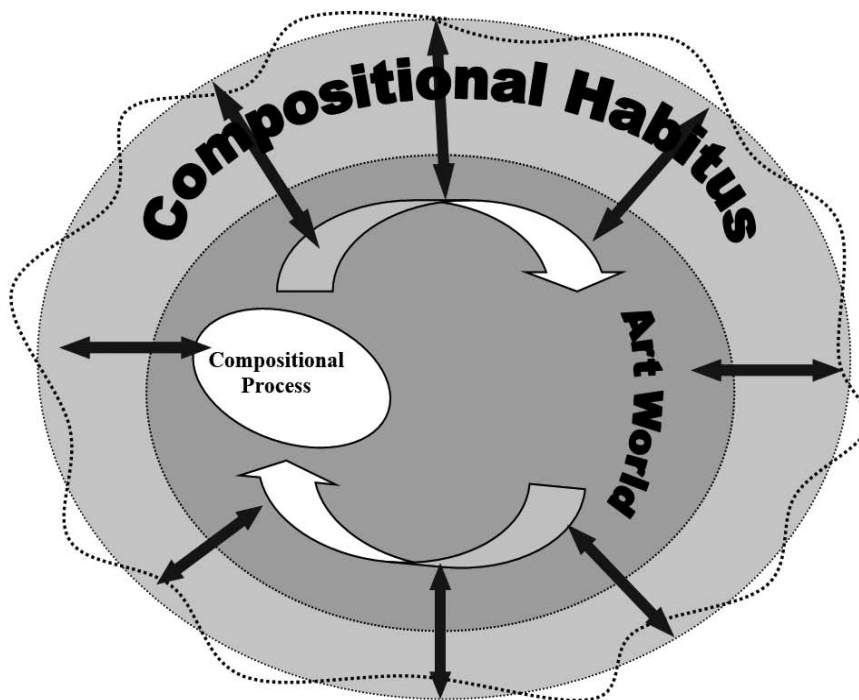
However, as King and other theorists have noted, if habitus is considered to be a fixed set of pre-extant 'structuring structures' imposed on individuals, where agents are acting according to a very defined manner of social interaction, social change, which we know exists, cannot happen and a large part of the subjective nature of social interaction included in virtuosic action in temporal space gives way to mechanical objectivity (King, 2000, p. 427). The habitus, which again provides a framework for action, must maintain the idea of 'fuzziness' from the 'practical theory'. If we come to an understanding that as individuals rooted in society from birth conditioned by our experiences, we can come to the idea that as we move through our life's career our habitus, or horizon, has the potential with each social interaction to shift or expand. I would go further and say that embedded in the notion of habitus is the desire to transform it, to elaborate, to improvise – a *transformational imperative*. Giving due diligence to social theorists I suggest we look at Bourdieu's notion of habitus in a smaller context. For our purposes here I will theorize with the notion of a micro-habitus – the *compositional habitus*. Within the world of western art music composers the *compositional habitus* is individually distinct via unique career paths but including shared knowledge, constituted from tonality, various formulaic constructs, performing traditions, etc., all of which are learned experientially by composers as they expand the fuzzy horizons of their particular compositional habitus through a *transformational imperative*. The compositional habitus is in no way fixed or, in light of structuration theory, part of a functional dualism.

Bourdieu's habitus links very well with Howard Becker's idea of '*Art Worlds*' (1982). Becker defines an art world as '[t]he network of people whose cooperative activity, organized via their joint knowledge of conventional means of doing things, produces the kind of art works that art world is noted for' (1982, p. x). There is obviously a strong similarity and some might say *habitus* and *art world* are synonymous. Both speak of social interaction, of shared knowledge, of conventional means. However, I see them as partially distinct, at least for conceptual purposes distinct. The compositional habitus is something larger than an art world, something that a composer always lives inside and develops intentionally and unintentionally. An art world on the other hand can be physically left behind. For example, composers working in Berlin in the 1920s left their art worlds – with their institutions and interconnections – behind when they fled the Third Reich. They established new art worlds in New York, Los Angeles, Palestine, etc. Of course, there is the residual experience of those art worlds which now form part of their compositional habitus. What seems clear is the symbiotic nature of this conceptual distinctness where art worlds require the interaction of habitus whilst maintenance and expansion of habitus requires the active context of

We can now look at the micro process in this system, the actual act of composing — the compositional process. Over the last couple of years I have conducted interviews with various composers on their compositional process. I will draw upon three of these here.

Gayle Young works extensively with microtonal music, with interest in the aberration of the mathematical relationship of the harmonic series. One of her primary focuses is the generation of unfamiliar sound levels. In response to this interest she has created new instruments which employ

microtonal scales. These new instruments afford Gayle the ability to easily step outside the bounds of western tonality. I asked Gayle to describe how she perceives her compositional process. She begins with improvisation. Ideas appear providing an aural perception of how a piece might sound. From these ideas Ms. Young looks for possible patterns laying out various possibilities. To negotiate these possibilities Gayle often employs mathematics, graphing pitches she has produced with her new instruments and setting up patterns of numbers to represent these pitches. These patterns are then used as the basis for forming a complete work. Accordingly, Gayle said the more experience you have in a medium, the faster and more efficient this process becomes (Young, 2004).

Dr. Andra McCartney, a soundscape artist describes her work as follows:

> 'I make multimedia soundscapes, working with my own location recordings to create websites, CD ROMs, tape works and performances that are evocative of my experiences of places, and their sonic and socio-political resonances. I like to use moving microphones, digital filters and multitrack composition to focus attention on intricate subtleties and sonic undercurrents in everyday life.' (www.andrasound.org)

One of Andra's main projects is entitled "Journée Sonores: Canal de Lachine", a project based on changes in the soundscape of the Lachine canal – Quebec, Canada, throughout an urban renewal. Andra and her colleagues make recordings along the canal. With these recordings they condense the "sonic images" following the sonic changes of the environment. The intent is to turn individuals' attention to the soundscapes in which they live. These sonic images differ from visual representations as they highlight the interplay of sounds emanating from disparate sources such as cars, boats, construction sites and people.

I asked Andra to describe the process she uses to create projects like "Journée Sonores: Canal de Lachine". The first step is to record her experience of a location, which she mediates by her own presence and sonic interest. She often records a location multiple times. Once recordings are complete she listens to them at least two times, taking note of intriguing sounds. Andra asks questions like "How do I want to organize this material? Linearly? Spatially? With a live performance element?" (McCartney, 2004). She then moves to practical considerations like how long the piece will be. McCartney then selects excerpts from the material using chance procedures with a six or twelve sided dice. She then incorporates the sounds she really enjoyed, assuming they weren't chosen through chance procedures. Using her sound editing software she employs pitch shifting and panning features bringing out specific sounds, especially harmonics, attempting to create a sense of movement. During this process Andra chooses small sections of recorded sound, usually no more than two seconds, and shifts them down in octaves, organizing the sounds into a stair-like formation with the lowest pitch on the bottom. Using material gleamed from pitch shifting and organizing she constructs a composition tightly formed as a unified whole. For her the form of a piece needs to be intelligible to the audience for aesthetic comprehensibility and to carry her socio-ecological messages (McCartney, 2004).

Dr. Clark Ross, a more 'traditional' composer is primarily engaged with commissioned works. His activity is highly mediated by the instrumentation and artists for whom/which he is writing. Quite often he works in varying degrees of correspondence with the artist(s) while composing. In the beginning stages he uses three generative strategies. The first is improvisatory, either at the piano or the computer. The second, much less in his control, is happenstance. Either a musical idea "pops" into his head, or in hearing music he grasps another direction in which it could have gone. The third he calls "catalogue shopping"; actively listening to a lot of music looking for things of interest. Of the three the first aspect, improvising, is his primary means of beginning the compositional process (Ross, 2006).

In my interview with Clark he described part of his process for writing *Last Dance*, a solo work for pianist Kristina Szutor. Over a three to four week period he worked from improvisation to more definite ideas, bringing the results to Dr. Szutor. After looking at the material Kristina felt it wasn't for her. Again he spent three to four weeks working from improvising to more definite ideas. Consulting Kristina for the second time she expressed the same feeling, what he had written wasn't for her. This exchange occurred three or four times before he wrote something she did like. In the end, he decided on a simple step-wise progression in context of a tango, familiar material which contrasted the 'head music' he had previously presented. Clark noted this elucidated an

element of the process he sometime employs, "I borrow elements from a style that is familiar to us all. In this case it was tango plus it was the descending step-wise from a minor chord; a minor, G major, F major, e" (Ross, 2006). He said that at one time he would avoid this type of writing because it felt less original and would be criticized. However, he now likes to write using familiar material taking it in unexpected directions. Once deciding on the tango he found the first section was finished in about 24 hours and was "an easy thing to keep going" (Ross, 2006). In the ensuing work, after the establishment of an initial idea, Dr. Ross spends time listening to the material, understanding it, looking for some intuitive direction in the music. If things are slow in this more intuitive stage he will turn to more arbitrary techniques dipping into his toolkit of compositional devices. In the end final decisions come down to what he would like to hear and what performers would like to play, and hopefully what audiences would like to experience.

Relating back to our discussion on art worlds and compositional habitus Gayle Young is very much focused on the transformational imperative as she develops new instruments to create unfamiliar, or unheard, sound levels. We also see elements of a strong compositional habitus in the heuristics of micro-tonal instruments, mathematical graphing of pitches and formulaic means of collating them. These are all part of her repertoire found within her habitus. She engages these with her art worlds performing on her new instruments bringing the new sounds to her audiences. At the same time her art world provides the means for maintaining and furthering her habitus in a very tangible way with the provision of materials to make new instruments and the funding received from performances and royalties, but also less tangibly in audience reactions. Similarly we see Andra employing compositional habitus specific heuristics of multiple recordings, distinction of interesting sounds, use of chance procedures, construction of geometric forms and sound editing software. All this serves an art world interaction based on creating a socio-ecological message. Clark Ross very clearly interacts with his art worlds as he interacts with those that commission works from him as well as the virtual audience also seen in the minds of Young and McCartney. He does this in a very procedurally directed way with defined generative processes – improvisation, happenstance, catalogue shopping – and with a set of knowledge in technical means of composition and instrument capability. What is clear from all three is the very definite social interaction in their work as well as a very definite procedure in how they do this – a cycle. They substantiate the ideas of compositional habitus and art world but also point to a discernible process by which these two are met – a procedural compositional process.

Summary of Individual Composition Process		
Gayle Young	**Andra McCartney**	**Clark Ross**
1. Generate new ideas • Create new instruments • Improvisation	1. Generate material through recording	1. Generative processes • Improvisation • Happenstance • Catalogue Shopping
2. Look for patterns in new material	2. Look for interesting sounds	2. Listen to material to understand it from different angles
3. Mathematically graph pitches	3. Use editing software to pitch shift, pan, create sound staircase	3. Look for intuitive directions or employ arbitrary techniques from compositional toolkit
4. Collate material into unified whole	4. Arrange sounds in a unified whole to create socio-ecological message	4. Create final work according to what he would like to hear, performers would like to play and audience would like to experience

Immediately striking similarities emerge. There is initially the generation of an idea, then a search for usable elements, followed by a period of manipulation according to compositional techniques with a final stage of unification. John Sloboda in *The Musical Mind: The Cognitive Psychology of Music* (1985) developed a model that reflects much of what has been seen here. To create his model he followed four means of inquiry; examination of creation through a composer's sketches – examination of composers' discussions on compositional process – examination of a composer at work – examination of the process of improvisation (pp. 102–103). The following is a reconstruction of his model:
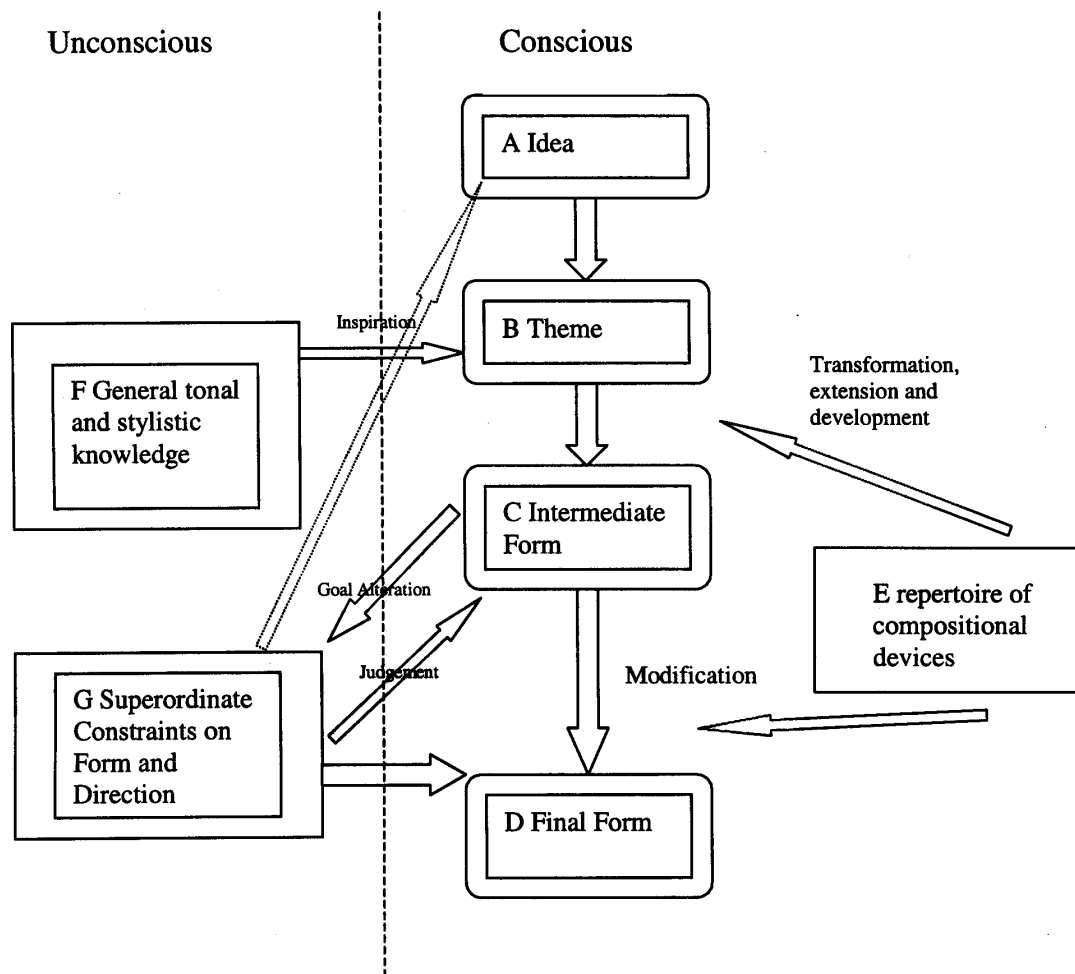
In this model he has divided the process into two levels; the conscious – what the composer can report accurately on, and the unconscious – that which the composer cannot report accurately on. The four primary steps of Idea, Theme, Intermediate Form and Final Form resonate with the four major steps outlined by Young, McCartney and Ross. In Sloboda's diagram Right angle boxes represent knowledge and structure found in the long term memory of composers, while curved boxes show transitory elements that occur in the composer's mind. The long term memory elements have been built up over time by the composer and can be used to solve new compositional problems. The curved boxes recognize elements change as compositional tools are used to solve problems. The square boxes show the repertoire that characterize the *solution generating* processes – our heuristics of the compositional habitus, while the curved boxes show the work of the *verifying* processes, our monitoring and social negotiation (Sloboda, 1985, pp. 118–119). I would like to expand on this model to better incorporate the idea of social agency and action. For example, the right angle boxes in Sloboda's diagram do not fully contextualize the constant changing in relation to social interaction of composers' knowledge. In effect, the model is more

like a snapshot of a composer at one given moment in time. The expansion I propose incorporates the life-career aspect of a compositional habitus as the actor's social experience grows and changes. Primarily I would like to add in the idea of social lenses which filter for the composer an infinite number of sonic possibilities at any stage in the compositional process. The social lenses, which represent social interaction, are both constraining – as they effectively rule out certain possibilities, and enabling – as they give a context or framework in which the composer can act. The process then as I see it looks more like this:
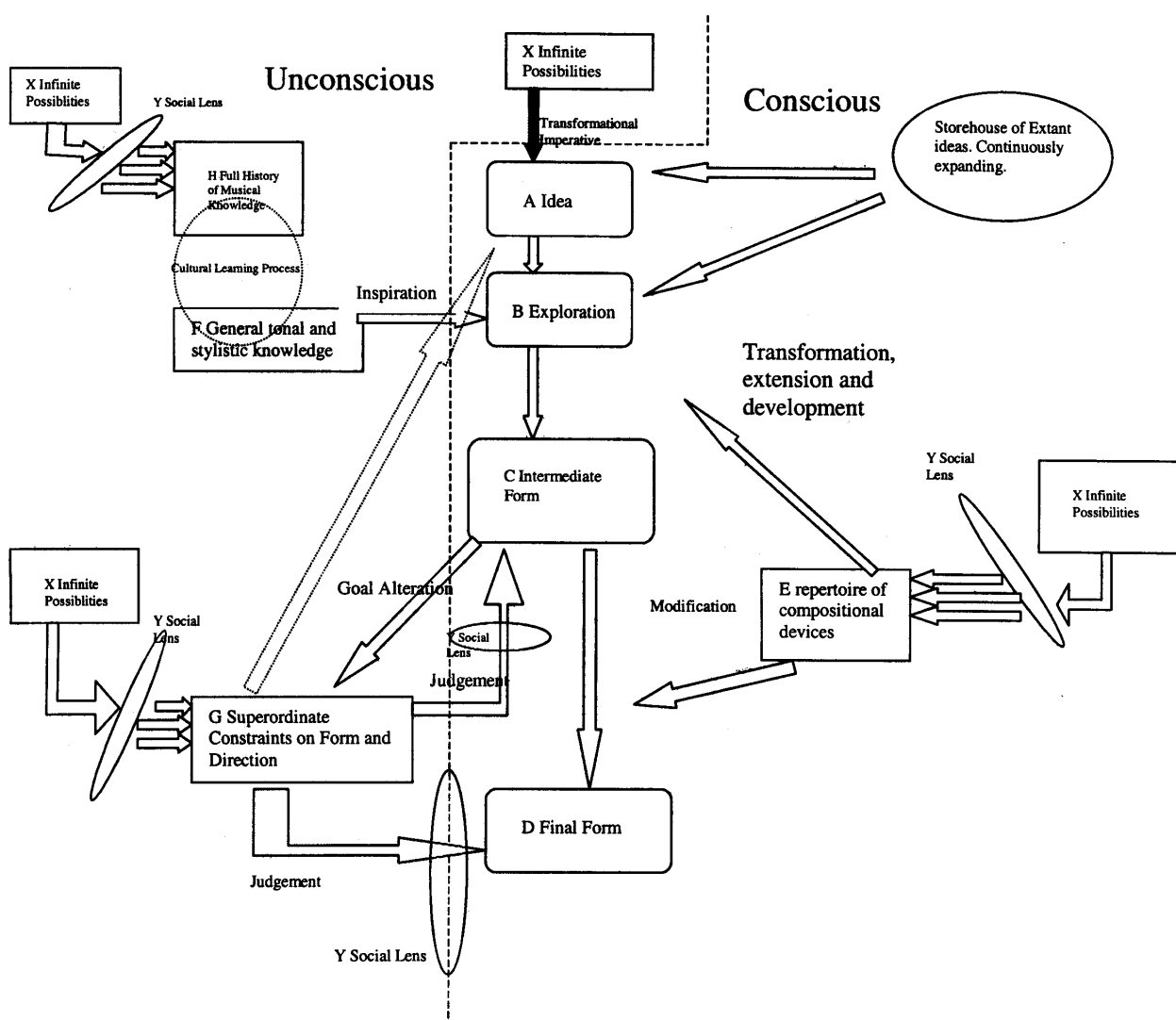
Following this diagram, ideas (A) come into the conscious state unconsciously or come consciously when taken from the storehouse of extant musical ideas. The idea is then turned into an exploration based on some sort of generative sonic idea – (B) which will reflect the general tonal – referring to tone not system, and stylistic knowledge of the composer (F). (F) is in a constant state of flux in relation to the development of the history of musical knowledge (H), and the composer's growing experience with (H). Furthermore, (H) constantly changes in respect to (X) channeled through (Y), the social lens which mediates what is acceptable and musical at any given point in history. A theme (B) then becomes an intermediate form (C) which may go through any number of permutations as influenced by (G) and (E). Note that (G) and (E) are developed by filtering (X) through the social lense (Y) and are in a constant state of flux. Final form (D) is developed through judgment and modification which constantly passes through (Y).

This process too is cyclic. Over time a composer engages in this process each and every time he/she musicks. There is an overarching plan involved in how a composer works from idea to final form and that there is a tendency to follow this cycle with each new musicking experience. Over time as the experiential data of the composer builds the cycle itself augments and spirals in different directions. This all happens in the practical context of an art world. The experience of the composer in an art world, or indeed in many art worlds, as he/she cycles through the compositional process continuously relates back to the compositional habitus through reflexive social action. The habitus then changes over time and continuously informs the compositional process through reflexive action. For conceptual means we can separate out these three elements and show how they are involved in a continuous cycle, but also how they interrelate and are completely symbiotic, and in reality, inseparable:
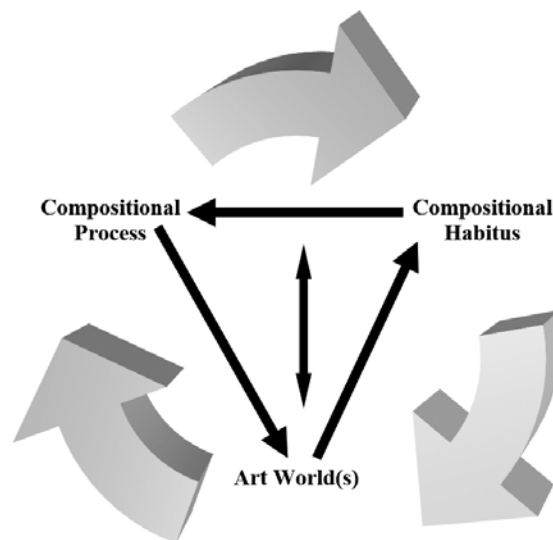
Over time, with the augmentation of the habitus through social interaction encoded through reflexive analysis, a composer both reconstructs the social reality around him/herself, as well as improvises and elaborates to create novelty and originality. The composer creates both continuity and disparity.

References

Becker, H. (1982). *Art Worlds*. Berkeley: University of California Press.

Babbitt, M. (1958). Who Cares if You Listen? *High Fidelity Magazine, 8*, February.

Bourdieu, P. (1986). *Distinction: A social critique of the judgement of taste* (R. Nice, trans.). London: Routledge and Kegan Paul.

Bourdieu, P. (1990). *The Logic of Practices*. Cambridge: Polity Press.

Busoni, F. (1965). Theory of Orchestration (Original Published 1905). In *The Essence of Music and other Papers* (R. Ley, Trans.). New York: Dover Publications.

Busoni, F. (1965). The Future of Opera (Original Published 1913). In *The Essence of Music and other Papers* (R. Ley, Trans.). New York: Dover Publications.

Busoni, F. (1965). The Oneness of Music (Original Published 1921). In *The Essence of Music and other Papers* (R. Ley, Trans.). New York: Dover Publications.

Cook, N. (2003). Music as Performance. In *The Cultural Study of Music: A Critical Introduction* (M. Clayton, T. Gerbert, R. Middleton, Eds.). New York: Routledge, pp. 204–214.

DeNora, T. (1995). *Beethoven and the Construction of Genius: Musical Politics in Vienna, 1792–1803*. Berkeley: University of California Press.

DeNora, T. (2002). Music into action: performing gender on the Viennese concert stage, 1790–1810. *Poetics Journal of Empirical Research on Literature, the Media and the Arts, 30*(2), pp. 19–33.

Giddens, A. (1984). *The constitution of society: outline of the theory of structuration*. Cambridge: Polity Press.

King, A. (2000). Thinking with Bourdieu against Bourdieu: A 'Practical' Critique of the Habitus. *Sociological Theory, 18*(3), pp. 417–433.

McCartney, A. (2004). *Andra McCartney: Multimedia Soundscapes*. Retrieved July 30, 2004 from http://www.andrasound.org

McCartney, A. (2004). Personal Interview. 16 July, St. John's NL, Canada.

Ross, C. (2006). Personal Interview. 23 March, St. John's NL, Canada.

Schönberg, A. (1975). My Public (Originally Published in 1930). In *Style and Idea: Selected Writings of Arnold Schoenberg* (L. Stein, Ed., L. Black, Trans.). London: Faber & Faber, pp. 96–99.

Sloboda, J. A. (1985). *The Musical Mind: The Cognitive Psychology of Music*, Oxford: Clarendon Press.

Small, C. (1998). *Musicking: The Meanings of Performing and Listening*. Middletown, CT: Wesleyan University Press.

Toynbee, J. (2003). Music, Culture, and Creativity. In *The Cultural Study of Music: A Critical Introduction* (M. Clayton, T. Gerbert, R. Middleton, Eds.). New York: Routledge, pp. 102–112.

Young, G. (2004). Personal Interview, 10 July, St. John's, NL, Canada.

Young, G. (2003). *Spool*, Spool Records. Retried on July 30, 2004 from www.spoolmusic.com/bioyoung.html

Santrauka

Komponavimas kaip sąlytis su muzika: kompozitoriaus socialinės realybės atkūrimas

Remiantis romantinės epochos diskursu, galima daryti išvadą, kad kūrybinis procesas vakarietiškoje profesionalioje muzikoje yra persunktas misticizmo. Šis mitas atsieja muziką nuo socialinės realybės, kurioje ji gyvuoja ir tarpsta. Pagal naujos pakraipos Ch. Smallo sąlyčio su muzika teoriją ir N. Cooko veikimo ir suvokimo tyrinėjimus, į naują komponavimo proceso modelį, atitinkantį J. Slobodos muzikinį-psichologinį požiūrį, įtraukiamas ir socialinis diskursas. Taip pat neatsiejami yra struktūravimo teorija (A. Giddens) ir *habitus* konceptas (P. Bourdieu), nagrinėjantys, kaip kompozitoriai atkuria ir transformuoja socialinę tikrovę.

Naudojant tokią komponavimo proceso diagramą, tyrinėjimų objektu tampa šio proceso socialinė prigimtis, taip pat ir tai, kaip kompozitoriai, atspindėdami savo meninį pasaulį, komponavimo technikomis grindžia ciklinį plėtojimą. Žvelgiant pro socialinę prizmę, spirališkai besikaitaliojanti komponavimo praktikų prigimtis nušviečia sudėtingą socialinį kompozitoriaus kaip tarpininko vaidmenį ir kartu issklaido visą mistiką.

Pavel Puscas

Icosian Game. **A Strategy of Configuration and Exploration of Musical Forms**

1. Prolegomena

Motto: "Die Matematik ist nur das Mittel für die letzte und allgemeine Menschenerkentniss"
[Friedrich Nietzsche: Fröhliche Wissenshaft]

It is obvious from the beginning that the notion of cycle derives from the Greek *kyklos*. In any of today's modern languages, it uses the same root as that from which both the attribute *cyclic* and the deverbative *cyclicity* derive. As a musicological term in musical art, it defines a compositional phenomenon that is related to the writing traits and/or to certain constructive aspects determined both by the composer's preferences and by the coercive framework of the style in which the discourse is written. Various dictionaries, treaties and reference instruments define the phenomenon relatively differently, but, in general, are in accord with the aspects mentioned above.

We should, however, note that most of the theoretical sources consider that the term has a specific, compositional application and that the different aspects encountered in various musical discourses can be subsumed under one and the same fundamental principle: the cyclic principle. This view is at least limited if not reduced, and in some aspects, even false. To give the cyclic phenomenon a substantial and coherent definition we must resort to concepts that are at the same time simpler and stronger, able to substantiate a global and coherent definition.

The concept of cyclic phenomenon is a universally perceptible reality. Both in modern and in today's physics, most phenomena occur (at least in certain sections of the physical processes) under the form of cycles, returns, identical or varied reiterations. Most physical phenomena at micro- and macrostructural level display this type of cyclic phenomena, from the domain of chemical reactions, body dynamics, meteorology, astronomy, general astrophysics etc. However, these cyclic phenomena should be included within the more general context of an entropic global evolution which excludes cyclicity at the highest level. Only the extreme levels (the *sub quantum* and the astrophysical level of the *macro universe*) do not display cyclicities.

The very idea of cycle and cyclicity needs a clearer and more profound definition. The science that can give it an accurate, apodictic, definition is mathematics. First, Euclidian geometry, defining all the phenomena related to circle geometry which are, essentially, cyclic in nature, then mathematical analysis, defining certain curves as being cyclic, and lastly advanced mathematics, concerned with group theory, transformation groups, topology, ring theory etc.

Essentially, if every time we have in mind the idea of cycle we think of the figure of the circle and of the related corollary aspects, then in the arts of the discourse and, particularly, in the field of music, due to the oriented existence of the Time vector, the correct representation should always be the cycloid and the related family of curves.

Cycloide
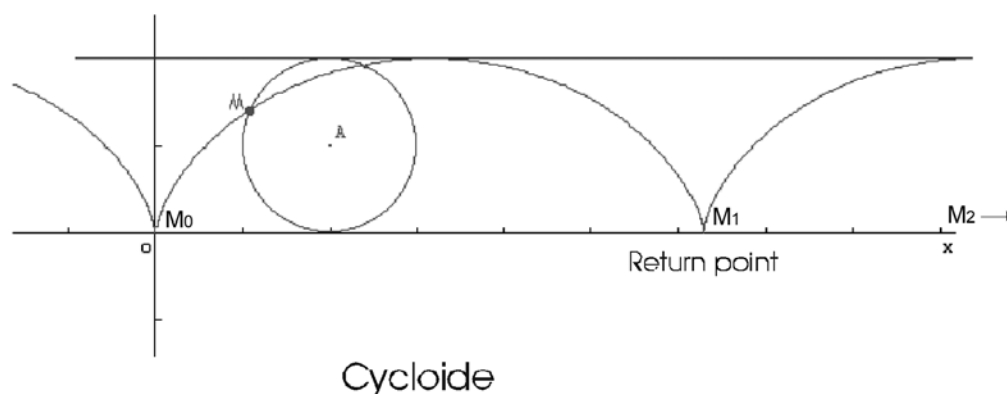
On the other hand, in what concerns the phenomenology of the musical discourse, we find the same relative lack of consistency in the denomination and in the definition of the cyclic phenomena. This is due to the existence of an extremely wide area of application of these phenomena, which are different qualitatively and quantitatively, but for which we use the same notion or concept. Although the extreme cases of cyclicity: *cyclicity = 0* (~ quasi-infinitely non-repetitive, chaotic discourse) and, respectively, *cyclicity = 1* (~ which should be an absolutely repetitive discourse of a simple or complex section repeated quasi-infinitely) do exist in musical art, they are isolated and extremely rare. For the first case we can quote certain 20th century non-repetitive discourses, constructed deliberately in this direction, which permanently exploit new aspects of content and form. For the second case we can quote discourses which are undefined in time, such as the Tibetan incantations, or the strictly repetitive minimalist music. Although significant, these discourses do not generally have an artistic sense from a compositional viewpoint, they being rather mechanically-generated discourses. Expressively, however, they can reach a level of musical incantation that can become quite significant.

2. Subjectio

Motto: "Musik sei ihrem Wesen nach Algebra"
[Novalis]

Cycle, Cyclic and Cyclicity in the Musical Discourse

The first hypostasis of creating a compositional cycle is that in which the determining vector is not the musical, but the poetical one. In the case when music treats (as in the lied, for example) certain poetic texts that are grouped within a cycle, the final musical elaboration will be a cycle, too. It is the case of the lied cycle op. 24 (*Junge Leiden* – Heine), op. 39 (Eichendorff), op. 42 (*Frauenliebe und Leben* – Chamisso), or op. 53 (*Dichterliebe* – Heine) by R. Schumann. In this case, music borrows a ready-made structure and generates what in the title is entered as: Cycle, Liederkreis etc. This genre is called cycle derived from the poetic primary source.

The second case is more interesting, as on form level it achieves cyclic structures that are derived from the poetic structure and finds analogue solutions in the musical language. The solution dates back to the times of the Greek lyrical music (the hymn or the strophic ode), while other interesting and significant solutions lie in the music of the troubadours (the ballad, the virelai etc.). What is relevant is the construction of a musical section (chorus, envoi) which recurs periodically. The constructive solution was then transferred to certain instrumental forms (rondo, ritornel) and became purely musical. Thus, a principle of cyclic construction affirms itself for the first time in a strictly musical context.

The cyclic phenomenon can manifest itself at various levels of musical structure, from that of the microstructure at cellular, figural, motivic, phraseological, periode or form level, to that of the integrality of the musical genre. However, we believe that these types of cyclicity are hierarchically different and therefore should also be defined by means of specific notions, as they describe varied and nonequivalent phenomena. What does cyclic actually mean in the musical discourse? An a priori definition requires the capacity to distinguish among the various sections and to attribute to some, a higher constructive sense through their intrinsic capacity (or maybe only through the composer's will?) to generate, by way of reiteration, new significant structures and to substantiate a longer, more profound discourse.

Such an issue obviously integrates itself within the essential distinction between the fundamental opposition between Identity – Alterity. What exactly entitles us to speak of the "unity" of a certain musical conglomerate and of its capacity to substantiate larger units by way of reiteration and of varied compositional procedures? This in fact is the essential issue of describing the musical discourse in the light of the musical forms theory which acts by opposing the identity of the material and the alterity of certain contrasting parts. How much identity should there exist at the level of a discourse deemed cyclic? How much alterity should there exist for the recurrence or reiteration to be different and significant?

If we take this criterion as valid, then all the "symmetrical" forms of the type ABA, ABCBA, ABCDCBA are cyclic, as they describe a cycloid which has the characteristic traits of an evolutive cycle subsequently closed. These well-known forms of the musical discourse have been explored

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for centuries, but were used at a higher level in the construction of the musical discourse in the music of the 20th century. Such symmetric solutions were used by Anton Webern or Béla Bartók and later by Romanian composers like Aurel Stroe in "Arcade" (Arcads) or Cornel Žăranu in "Ghirlande" (Guirlands). The titles are programmatic and significant, for the music itself is conceived on cycloid trajects.

However, on a more profound level we should take into account the possibility of construction in terms of treating an initial material in varied forms and discourses at syntax, dimension, specific place and concrete approach level. Thus, any variational discourse should be defined by excellence as cyclic, since in each variation it repeats the initial material in other forms, structures and expressions. Among the examples of highest perfection of this type of cyclicity, we should probably define "The Goldberg Variations", beginning and ending with the thematic "Aria", but which can also be grouped in larger periodicities of 10x3, 6x5, 5x6 or 3x10, according to the meaning we assign to the cyclicity of the variations and analytical hypotheses that we are willing to approach. The variational cycle holds an important place in Anton Webern's work. Mention should be made here of the Variations Op. 27, or of the 2nd part of the Symphony Op. 21 – Variations. These have the symmetric structure A-B-C-D-Cv-Bv-Av, where in respect to the symmetry axis the variation is the 4th.[1]

Another hypostasis of cyclicity occurs in composite genres like sonatas, suites and baroque partitas, which often make use of common intonational melodic typologies to generate certain extremely different parts in terms of several parameters (tempo, meter, dynamics, character etc.). Practically, this can be found just as well in certain old musics, such as the technique of constructing the Middle East musical discourses on an essential makkam, or the use of specific figures in elaborating the Gregorian chant, or generally wherever we have a musical style whose writing techniques and stylistic features hierarchically impose certain international typologies as fundamental. Wherever there is a style, there are "stylemas". These stylemas can be tetrachordal for the vocal music of the Renaissance, the tetrachord or hexachord for the music of the Baroque, the trichord or trisone for the Classicism, more complex melodic harmonic typologies for the Romanticism etc., up to the constructive typologies of the dodecaphonic writing. These substantiate the construction of "cyclic nuclei" used subsequently in the compositional strategy.

Probably the most profound meaning and the most important compositional significance of the concept of cyclic, cyclicity refers to the capacity of certain microstructures to enable the composer to impose unity and coherence to a large-dimensioned composite structure. In this sense, the cyclic phenomenon has already imposed itself upon the superior conscience of certain great composers, evolving from possibility to necessity and thence to the compulsoriness of such a complex constructive solution. Haydn's or Mozart's chamber and symphonic music displays striking, though discreetly and parsimoniously used examples. Beethoven is considered to have been the one who introduced this composition technique as a necessity and who, thanks to the importance and complexity of his compositional thinking, "imposed" its use as an quasi-obligatory requirement for any subsequent composition attempt. He is looked upon as a "catastrophic" phenomenon in the history of the European compositional thinking, an incommensurable leap in the compositional conception and will, and while no music could be written thereafter without either following his path or being against it, he could be, in no case, no longer ignored.

Here was a rather brief case history of the variability of this concept, as well as the extremely different composition solutions it can produce. If during the past centuries the musical discourse used to be achieved within a relatively coherent stylistic and syntactic framework and its techniques could be defined even in the absence of the composer's comments, the 20th century music poses more difficult, more specific and at times even insurmountable challenges in the handling of this concept. We are in a completely different historical, mental and cultural context. The concept of general style disappears and is divided in just as many styles as there are great composers. Skriabin, Bartók, Stravinski, Schönberg, Berg, Messiaen, Schostakovich, Prokofiev, Boulez, Stockhausen, Lutosławski represent just as many different styles and languages. The composer's quasi-obligation to be original on a strictly individual level and to search for new and unexplored techniques of elaboration of the musical discourse becomes general and inherent as an ontological condition of creation. A new and imperious necessity is imposed on the composer to become himself a theoretician and musicologist in the explanation and analysis of his own language.

Thus, even though the technique in itself and the idea of cyclicity do exist, they are conceived, achieved and received in a fundamentally different way. All of these are supplemented by an ever greater, sometimes insurmountable difficulty in the real-time perception of the composer's intentions and of the writing elements that are objectively present in the score. All the above put under a question mark the validity of the technique itself, which is no longer perceived as an effort to confer unity, coherence and integrity to a discourse that is diverse in time, it being decodable only upon a very professional, detailed and attentive analysis. In the end, we can ask ourselves if we do have a good definition for the sense of cyclic and for the cyclic techniques applied in the musical writing. Which should the identity level of the sonorous material be, to justify the qualifier of cyclic? How far can the alteration procedures be pushed (variation, handling, development, cryptic essentialization) in order to constitute a reference plan for the idea and qualifier of cyclic? And, after all, there are objective characteristics of the musical expressivity that can emphasize the cyclic character of a work, which in most cases is mental and constructive in essence.

All this procedures are in fact particular cases of an general and fertile phenomenon – the Symmetry.

3. Adjectio

Motto: "Der Musik kommt die Harmonie zu, wie die Symmetrie der Mathematik"
[Heinrich von Kleist. Brief an Marie von Kleist. 1811]

Musical forms and mathematical isomorphism

In the evolution of human culture, considered as a whole (meaning the integration of artistic creation, the rational-scientific and abstract mathematic) certain fundamental concepts have emerged as essential models of the formal configuration. These models – true paradigms of thinking – have a general capacity of application in any zone of thinking and/or creation. One of these universal paradigms is the geometric spatial theory of the regular polyhedral solids.

Discovered in the Greek antiquity (apparently even before the theory of polyhedral solids established by the Pythagorean school) and intensely studied and interpreted on the gnoseological and metaphysical levels, these solids become essential models of the Greek thinking. The Pythagoreans postulated these regular polyhedra (the tetrahedron, cube or hexahedron, octahedron, and icosahedron) at the basis of existence as fundamental structures of essential elements, respectively, fire, earth, water and air. It is an ancient metaphysical conception coming from the Ionian philosophy and developed in the School of Crotona. The last and most complex one, the dodecahedron (the only based by the connection of the regular pentagon in dihedral angles, that implies the golden number – φ^2), was identified as The Spirit and/or The Universe in its totality. Because the notions of this theory have been apprehended in the platonic dialog "Timaeus", exposing the most complexly and rationally articulated cosmological conception of the Greek antiquity, the polyhedra became known under the denomination of "platonic solids".

The intrinsic beauty and the amazing mathematical proprieties of these five forms have fascinated the scholars (philosophers, mathematicians, artists) from Plato to NATO. The complete analysis of platonic solids, given in the last book of Euclid's *Elements* is the coronation of this singular work. Johannes Kepler believed his entire life in the correspondence of platonic solids and the six planetary orbits (known in his time) by the arrangement of the five regular solids inside the Saturn orbit. Moreover, he conceived musical harmony in the strict letter of the theory of these regular solids. The complete topologic theory of the polyhedra was established by Euler in the 18th century. Today mathematicians have ceased to regard the polyhedra with such a mystical respect, but they have continued to study the theme in the frame of topology or theory of graphs or groups. We have asserted these concise historical considerations in order to emphasize the extraordinary influence of these platonic solids over the entire human knowledge, and mostly because even today, there are sources of fascination and revelatory surprises.

"There are few experiences so exciting for the mathematician like the discovery that in fact two mathematical structures apparently independent from each other, are in reality in close connection".[3] This is the phenomena called isomorphism. In the 19th century, the great British mathematician William Hamilton invented a special game named "icosian game", based on the continuous graph along the edges of solid angles of polyhedra. Not long after that, William Crowe

discovered an amazing congruence between the icosian game and another game named "The Hanoi Tower" (a very old oriental game with mystical connotations) has been reinvented in Europe by E. Lucas in 1883. To be more exact, between the hexahedron and the Hanoi tower the strategies of complete exploration (cube) and complete mutation of elements (of the tower) are strictly isomorphs, i.e. identical.


Cube (hexahedron)   Hanoi Tower

We don't intend to explore the details of geometrical or philosophical development of this phenomenon, but we notice a very significant congruence between these two "games" and the "game" of musical forms as strategy of placing different parts in the musical discourse. The specific algorithm for the covering of all the vertices of the cube (8 vertices, 12 edges, 6 faces) along the edges (with the restrictive condition: never pass twice by the same vertix) and the "resolution" of Hanoi Tower (equally restricted by the condition: never have a bigger disk upon a small one) gives the following series of elements: ABACABA. In this series the musician can intuitively recognize the well-known model of the musical forms: the classical rondo. It goes without saying that we must have a notation of each edge of the hexahedron that connects two vertices (the edges oriented in the same direction are similarly notated: A, B, or C).

The graph in two dimensions is:
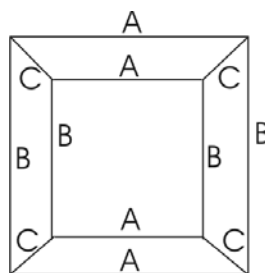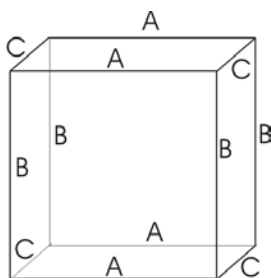
However, we accomplish the task, we will obtain the same formula: ABACABA or ACABACA, which are similar or isomorph. The algorithm is strictly determined, no matter what the point of beginning or the selection of edges is.

If we explore other politopes beginning from one vertice we will obtain other formulae strictly determined by the number of vertices and the relation established by the edges. In the case of tetrahedron (6 vertices, 6 edges, 6 faces) no mater of the vertice of beginning or the direction (with the single condition: to be a hamiltonian graph) we will obtain always one formula ABA which describes the tripartite form with reprise:
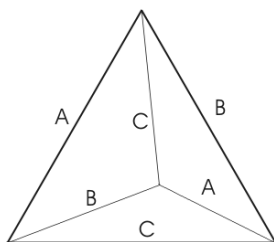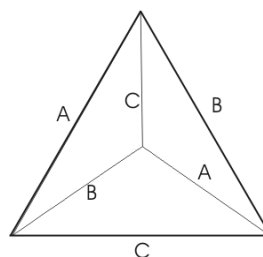
Tetrahedron   Tetrahedron 2-dimensional graph

In this case the formula ABA is equivalent of ACA or BAB, BCB, CAC, CBC.

Going further in our examination considering the octahedron (6 vertices, 12 edges, and 8 faces) we will obtain a new formula than correspond at this particular structure. In fact the octahedron is symmetrically isomorphic to the cube and the resultant formula is ABCAB.
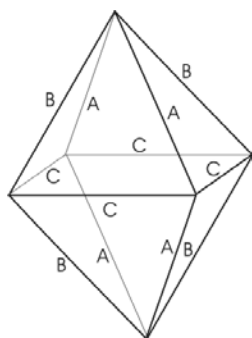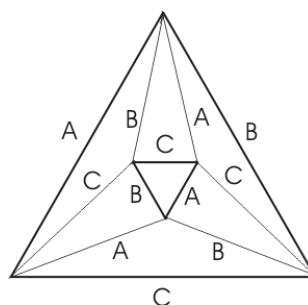
octahedron   octahedron − 2-dimension graph

We can start the graph anywhere and the results will be also:

AB C AB	BA C BA	CA B CA
AC B AC	BC A BC	CB A CB

all identical because the different formulae results by the symmetry of rotation. This is the formula of the bitematic sonata.

Considering the history and evolution of musical forms it is very clear that they are not elaborated by a single composer or in a single musical style. They are constructed slowly and painfully by intellectual effort by a sort of collective finding the best solution at the problematic of composition. It is the result of a discursive process cumulating lent contributions and continuous optimizations. By this process results the musical forms as known in the classical theory of forms. It is no trace, not a clue to indicate a conscientious realization of forms as polyhedral graphs, therefore it is excluded the possibility of an intentional connection. But the reality is here supported by strong arguments and the complete isomorphism of the three cases presented is not only exciting or disturbing, but also generator of new and important significations.

4. Postlegomena

Motto: "Musikalische Form ist Vorsprung der Macht in der Raum"
[Hans Mersmann. Formenlehre]

The "Hanoi tower" is known in the ancient Asia in different hypostasis, the most notorious one being legendarily located in the Temple of Benares (in India). By this legend, the priests of the temple were always engaged in a continuous work consisting in the complete mutation of 64 disks carved in crystal. Once the transfer accomplished, the exact moment of the end of the world will be attained and the Universe will collapse.[4] It is obviously an ancestral model of action and thinking, corresponding in spirit to an archetypal and paradigmatic Buddhist image of the Universe.

Likewise, the polyhedra were known in the Asiatic world and in the Mediterranean space long before their theorization in the Pythagorean School or before the Platonic commentaries. They correspond to a fundamental image of the structure of the world, as superior order and symmetry.

The musical forms, elaborated in a long process of discursive evolution and studied by the historic and systematic musicology, obviously evoke the same superior models of order and symmetry. It seems very likely that the human creative spirit, irrespective of the nature of the problems it has to face, has the same algorithms of exploration of the figurative reality and of configuration of spiritual order.

"In the same Platonic manner, the final theory of the Universe will be characterized by a series of important exigencies of symmetry, which we can already indicate today. Even if we examine this theory with the whole skepticism – which defines the scientist's highest obligation, – we are allowed to affirm that we have reached structures of extraordinary simplicity, unity and beauty and that these structures appear to be more important because they are true not only in a special field of physics, but for the whole Universe"[5].

In the light of the newest theory of physics (*theory of whole* and especially *theory of chaos*) it seems that a chaotic phenomenon (large classes of phenomena are chaotic) is in fact determined by subtle laws of equilibrium: the so-called "strange attractors". The construction of musical forms could be described as a chaotic phenomenon. The creation of hundreds of composers tends to be regulated in this case this by a strange attractor: the regular polyhedra.

And if in the model of Platonic solids, or in a game with archetypal mystical correspondences, it is possible to find the unity of the whole world according to Heisenberg's assertions, it is very probable that in their essence the musical forms reflect the same superior order and unity. Apparently separated and historically disseminated in the time and space of the human culture, the evolution of musical forms seems to have been determined by higher (or more profound) laws of symmetry and structure.

These laws are situated at a higher level, above epochs, styles and individual creation. They are supra-stylistic hypostasis and each period or style will repeat and re-find the same structures. In fact, the most "troubling" coincidence in this case is the superposing of a temporal configuration, in a perfect congruence with the spatial one. Hans Mersmann has seen it right: "the musical form is the projection of the force in the space".

Abstract

The paper is divided in four sections:

1. *Prolegomena*. The concept of cyclic phenomenon is a universally perceptible reality

The very idea of cycle and cyclicity needs a clearer and more profound definition. The science that can give it an accurate, apodictic, definition is mathematics. Particularly, in the field of music, due to the oriented existence of the Time vector, the correct representation should always be not the cycle but cycloid and the related family of curves. We find relative lack of consistency in the denomination and in the definition of the cyclic phenomena. This is due to the existence of an extremely wide area of application of these phenomena, which are different qualitatively and quantitatively, but for which we use the same notion or concept.

2. *Subjectio*. Cycle, Cyclic and Cyclicity in the Musical Discourse

There are examined different hypostasis of the phenomenon and identified the sources, also the specific principles of construction. Such an issue obviously integrates itself within the essential distinction between the fundamental opposition between Identity – Alterity. This in fact is the essential issue of describing the musical discourse in the light of the musical forms theory which acts by opposing the identity of the material and the alterity of certain contrasting parts. How much identity should there exist at the level of a discourse deemed cyclic? How much alterity should there exist for the recurrence or reiteration to be different and significant? Thus, even though the technique in it and the idea of cyclicity do exist, they are conceived, achieved and received in a fundamentally different way. In the end, we can ask ourselves if we do have a good definition for the sense of cyclic and for the cyclic techniques applied in the musical writing.

3. *Adjectio*. Musical forms and mathematical isomorphism

There are asserted some concise historical considerations about polyhedra, in order to emphasize the extraordinary influence of platonic solids over the entire human knowledge, and mostly because even today, there are sources of fascination and revelatory surprises. We find a significative congruence between Hamiltonian graphs on polihedra and important formal solution in the field of musical forms like: tripartite form with reprise, rondo, and bitematic sonata. Considering the history and evolution of musical forms it is very clear that they are not elaborated by a single composer or in a single musical style. They are constructed slowly and painfully by intellectual effort by a sort of collective finding the best solution at the problematic of composition. It is no trace, not a clue to indicate a conscientious realization of forms as polyhedral graphs, therefore it is excluded the possibility of an intentional connection. But the reality is here supported by strong arguments and the complete isomorphism of the three cases presented is not only exciting or disturbing, but also generator of new and important significations.

4. Postlegomena

Like the polyhedra or the Hanoi tower, the musical forms, elaborated in a long process of discursive evolution and studied by the historic and systematic musicology, obviously evoke the same superior models of order and symmetry. It seems very likely that the human creative spirit,

irrespective of the nature of the problems it has to face, has the same algorithms of exploration of the figurative reality and of configuration of spiritual order. The construction of musical forms could be described in the light of Chaos theory as a chaotic phenomenon. The creation of hundreds of composers tends to be regulated in this case this by a strange attractor: the regular polyhedra.

Notes

[1] Webern himself says: "the forth variation it is the midpoint of the whole movement, after which everything goes backward", quoted after Robert U. Nelson: *Webern path to the serial variation,* PNM, Vol. 7, No. 2 (1969), pp. 72–79.

[2] In fact φ as irrational number, are the most irrational number known today in mathematics.

[3] Gardner, Martin. *Mathematics, Magic and Mystery*, Dover, 1956, p. 73.

[4] This "cosmic" rondo ABACADAE .... EADACABA (assuming one movement per each second) will be accomplished in approximately 584, 942, 417, 355 years!

[5] Heisenberg, Werner. *Descoperirea lui Plank şi problemele filosofice fundamentale ale teoriei atomului* in: W. Heisenberg, "Paşi peste graniţe", Ed. Politică, Bucureşti, 1977, p. 34. [German edition*: Schiritten über Grenzen,* Frankfurt, 1967]

Santrauka

Icosian Calculus žaidimas. Muzikos formų konfigūravimo ir tyrinėjimo strategija

Muzika ir matematika turi daug panašumų ir galimų sąsajų. Muzikos formą neabejotinai galima nagrinėti pagal daugybę matematikos teorijų, tokių kaip kombinatorinė algebra, mozaikos teorija, ribų teorija ir kt.

Pagrindinio šioje konferencijoje nagrinėjamo klausimo (ciklo idėja muzikoje) kontekste verta dėmesio yra airių matematiko W. R. Hamiltono (1805–1865), įvedusio Hamiltono ciklo sąvoką, teorija.

Hamiltono ciklas – tai toks ciklas, kuris eina per kiekvieną briaunainio viršūnę (bet kelių dimensijų erdvėje) tik vieną kartą. Taikant Hamiltono ciklą muzikos formai, jis yra griežtai homomorfiškas. Visi briaunainio grafai veikia kaip modeliai, tiek sprendžiant pagrindinius formos klausimus, tiek ir organizuojant teminę medžiagą, pvz., ABA forma, rondo forma, sonatos forma ir kt.

Net jei muzikinis mąstymas ir neturi tvirto matematinio pagrindo, griežtas homomorfizmas gali padėti išspręsti, regis, visiškai skirtingas problemas. Ir, žinoma, abiejose srityse veikia ciklo fenomenas.

Kostas Chardas

Different Styles/Common Thread: Cyclic Forms and Principles in the Different Stylistic Phases of the Greek Composer Yannis A. Papaioannou up to 1965

Abstract

The notion of cyclicism as intending to enhance formal unity seems to have been engraved upon Papaioannou's (1910–1989) artistic awareness through his meticulous reading of Vincent d'Indy's Cours de composition musicale during his apprenticeship years. While this concept is evident in the thematic affinities and cross-references between movements in his first multi-movement works of the 1930s, it remained central to his music up to 1965, in spite of his change from a style in which tonal elements played a central role to the gradual assimilation of twelve-note elements in his post-1950 music.

Through analytical reference to works from different periods, this paper explores the various realizations of the concept of the cyclic form and their structural implications (for example, the association of the gradual recycling of material with scenic action in the ballet Pirates of 1952). Moreover, it concentrates on two cyclic aspects which are associated with the notion of telos: the recurrence of the opening material, and the combination (superimposition or juxtaposition) of previous events in the last formal section. Both aspects are discerned on different sides and levels of structure. Firstly, in the large-scale thematic recurrences (such as in both the 'tonal' Sonata for violin and piano of 1936 and the twelve-note 12 Inventions and Toccata for piano of 1958) and the combination of previously-heard thematic or motivic material in the last movement (such as in the 'tonal' Scherzo of 1938 and the twelve-note Sonata of 1958, both for piano). And secondly, in the serial structure of some of Papaioannou's twelve-note works (the reappearance of the opening serial form delineates both local- and large-scale formal articulation, while the last movement utilizes all the reordered series which are used separately in previous movements). The aural perceptibility of these serial structures is also critically assessed.

Prologue

In the short programme notes for the first performances of his First and Third Symphonies Yannis A. Papaioannou (1910–1989) focuses on the same aspect of formal structure despite their stylistic differences: the thematic affinities between the movements.[1] Written in 1946 and 1953 respectively, the two symphonies are quite representative of the change in Papaioannou's music from a style in which tonal elements played a central role to the gradual assimilation of twelve-note elements in his post-1950 music – the main stimulus behind this change might be found in the experiences, bibliography and music scores that Papaioannou acquired during his first stay outside Greece in his life, mainly in Paris, during the academic year 1949–1950.

Both the above-mentioned programme notes allude to the notion of the cyclic form. This notion as a parameter that enhances formal unity seems to have been engraved very early upon Papaioannou's artistic awareness: through his meticulous reading of Vincent d'Indy's Cours de composition musicale, which he bought in 1926, when he was sixteen years old.[2] In this treatise d'Indy describes and 'promotes' the notion of the cyclic form as an important compositional model that ensures formal unity, placing his own music in the tradition of the music of Beethoven and Franck and having at the basis of his discussion the idea that motivic unity is equivalent to organic unity.[3] This idea lays at the core of Papaioannou's discussion in the only two extant texts in which he makes explicit reference to the compositional process; written in 1965 and 1975, these texts demonstrate the enduring influence of d'Indy's ideas to Papaioannou.[4]

Nowadays, the ideas of d'Indy and other romantic theorists and composers have been seriously questioned, specifically regarding the equivalence of motivic unity to organic unity. Leonard B. Meyer, for example, in an article published in 1991 focuses on the 'distinction between unity through syntactic function as opposed to unity through motivic similarity' arguing in favour of the first (Meyer, 1991: 244).

However, in the case of Papaioannou the most interesting aspect in the application of the cyclic concept is that it can be understood as the common thread within his stylistic evolution. The present paper explores the various realizations of the notion from his first 'tonal' works of the 1930s up to the twelve-note music of the late 1950s and mid-1960s. Moreover, it proposes that two cyclic aspects are associated in his music with the notion of telos on different levels of formal structure: the recurrence of the opening material, and the combination (superimposition or juxtaposition) of all the previous main thematic material. Since these principles are also discerned in the serial structure of much of his twelve-note music, it is proposed that the notion of telos is also served by these serial structures, although in this case the aural perceptibility of this aspect has to be critically assessed.

1. Various realizations of the cyclic concept within stylistically different contexts

According to d'Indy, the 'cyclic' aspects that serve a unifying function and provide the sense of cohesion and continuity to a multi-movement work are the thematic or motivic elements which are common between different movements (d'Indy, 1912: 375). D'Indy relates this notion with the characteristic romantic idea that the theme is the protagonist of the musical drama, the unfolding of which thus depends on thematic transformation or metamorphosis (d'Indy, 1912: 376–385).[5] The examples which will be discussed from Papaioannou's music demonstrate the stable influence of d'Indy's ideas on cyclic elements. What is particularly interesting is how a characteristically popular idea of the nineteenth century serves as a vehicle for the expression of twentieth-century (and occasionally also nineteenth-century) stylistic ideas in Papaioannou's music through the different stylistic connotations of the cyclic elements and the various ways through which they are manipulated – this aspect certainly raises the problematic issue of the relationship between style, technique and aesthetics, which is however beyond the scope of this paper to be further pursued.[6] The lack of extant sketches for most of the works discussed does not allow identifying the degree of compositional intention which is entailed in the processes described. However, this aspect is palpably demonstrated by the sketches of the Third Symphony. The thematic material of the whole piece is worked out in the places entitled 'Matérial'; the melodic, rhythmic and harmonic experimentation with a twelve-note series (a 'thematic source', according to Papaioannou's own comment) plays an important role in this process.[7]

Example 1a lists the manipulation of cyclic elements in three works: the Humoristic Suite of 1936 (one of Papaioannou's first multi-movement works), the Scherzo of 1938 and the Sonata for violin and piano of 1945. As shown by the brackets, in all three works these elements have motivic function in the opening movement and reappear slightly modified, in also a motivic function, in the following movements. In the Preludio of the Humoristic Suite the mordent figure and the ascending perfect fourth act as symbols of the music of the past, taking part in the parodistic treatment of Baroque elements through their presence within tonally unstable environments – an element of the structure that reflects the humorous aspect of the title. Moreover, the modification and harmonization of both figures in the subsequent movements contributes to the overall route from the tonal instability of the Preludio to the relatively tonal (or better modal) stability within an F♯-centred modal context of the final two movements.

A stepwise figure is also one of the two cyclic elements in both the Scherzo and the Sonata (see Examples 1b and 1c). In the first case the initial harmonization of this figure as an embellishment of a major seventh reflects the 'impressionistic' inclination of Papaioannou's music of this period; in the second, this figure is first heard as an ornamentation of the centric note (D), within a modal environment which reflects Papaioannou's wider objective of these years to focus on what was perceived as the modal vocabulary of the Greek musical tradition.[8]

Quite different is the material of the cyclic elements in Papaioannou's post-1950 music. In the Third Symphony it is the opening melodic twelve-note series which is treated cyclically. However, as was the case in the Humoristic Suite, the harmonic modification of one of the cyclic elements contributes to the sense of an overall process from tonal bleariness to tonal clarification. More specifically, the melodic fragment based on the first nine notes of the RI form of the series initially adds to the tonally unstable sense of the slow introduction,[9] while through its Bb-centred harmonization at the opening of the last movement (see Example 2) it announces the centricity of the Bb major triad, which is later confirmed by the more stable diatonic environment throughout this

Example 1a

Humoristic Suite (1936): The cyclic elements

I. Preludio
Lento

II. Gavotte
Moderato grazioso

Musette

III. Sarabande
Molto Andante

V. Interludio [Passacaglia]
Moderato

VI. Gigue
Vivo
p leggiero

Example 1b

Scherzo for piano (1938): The cyclic elements
Moderato
b. 1
p

b. 27
Calmo *semplice*

Poco vivo
b. 88
pp leggiero
94

Example 1c

Sonata for Violin and Piano (1945): The cyclic element
I. Allegro serioso

Vln.

Pno.

II. Adagio
Vln.

Pno.
pp dolcissimo

III. Vivace   pizz.
Vln.

Pno.
p leggiero

Example 2

Symphony No. 3, III, bb. 1-3: Combination of serial and tonal elements
Pesante
RI-0   1 2   3   4   5 6 7   8 9

(timpani)

Bb: I⁷   (Vadd 6)   III⁷   v⁷   I

Bb: I⁷   (Vadd 6)   III⁷   v⁷   I

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movement. In the twelve-note works of the years 1958 onwards the focus is on rhythmic cyclic elements. For example, in the Sonata for piano of 1958 a dotted figure is first heard by the opening gesture of the piece (bb. 1–4) and is the most characteristic rhythmic element in the second section of the second theme of the sonata design in the first movement (bb. 118–121); moreover, it gains motivic focus in the second slow movement.

Apart from the use of the cyclic notion within traditional formal moulds, reference should also be made to Papaioannou's treatment of this principle in works that explicitly intend to project an extramusical programme. The difference in the realization of the cyclic notion between the Symphonic Legend Vassilis Arvanitis written in 1945 and the ballet Pirates of 1952 reflects his serious rethinking of his music during these years.[10] The thematic structure of Vassilis Arvanitis mirrors the romantic attitude of giving representational power to themes. More specifically, Example 3 lists some of the thematic appearances in different movements of the melody that is intended to be associated with Vassilis, the protagonist – it is worth mentioning that the extramusical association is not only implied by the title but is explicitly stated by the programme notes accompanying the performances of this piece: these included the condensed version of the story of the book from which this piece was inspired.[11] Despite the modal character of the music, a reference to the tonal implications of two of the various appearances of the theme provides an interesting reading of the extramusical connotations of these recurrences. Thus, the fact that it first appears as the second theme in the sonata form of the second section of the first tableau (in the subdominant) might be considered as a subtle implication of the unstable character of the protagonist, despite its dynamic presentation by the brass. On the other hand, in the seventh tableau the same theme appears within a modal environment centred on D, the most prominent tonal centre of the whole work,[12] possibly depicting the bravery of the protagonist that is the main topic in the programme of this tableau.

Example 3

Vassilis Arvanitis: Some appearances of Vassilis's theme

In the ballet Pirates there is a strong sense of leitmotivic technique in the association of specific material with the protagonists, although here one could not literally speak of motives that, according to Arnold Whittall's definition of the leitmotif, 'provide the principal, "leading" thematic premises' of the overall formal structure (Whittall 2001). More specifically, after the separate presentation of the three protagonists on stage in the first three tableaux, sections or just fragments of these tableaux are later treated in a quasi-cubist way. They are treated as 'objects sonores' (to use an expression by Stravinsky, whose influence is evident in the preponderance of the ostinati throughout the work). These fragments are juxtaposed or superimposed in new combinations, often on their initial pitch level, without being functionally assimilated by the new pitch

environments. For example, as shown in Table 1, in the eighth tableau most of the music up to bar 32 derives from the first and third tableaux, while, as demonstrated in Example 4, the opening gesture of the ninth tableau is exclusively based on the combination of fragments derived from the opening tableaux.

Example 4 *Pirates*, IX, bb. 1-3: Material derived from II, III and IV
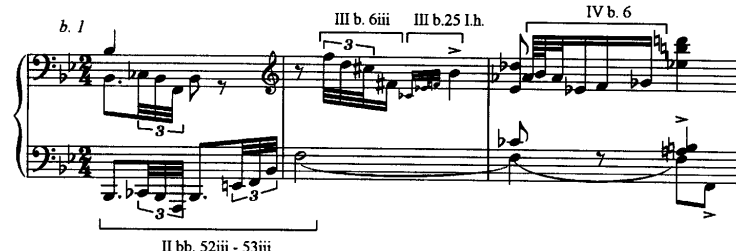
While in terms of compositional intention the reiterated sections seem to serve the same function as the thematic cross references in Vassilis, here their appearances result in the most interesting aspect of the unfolding of the overall form: they add to an increasing recycling of previously-heard material which, in an abstract sense, counteracts the sense of non-progressiveness created locally by the wide use of ostinati throughout each movement.

Thus while the notion of cyclicism according to d'Indy serves mainly the idea of unity which does not axiomatically involve any particular diachronic process, in Papaioannou's music this notion often plays a significant role in contextually defined temporal processes such as the gradual emergence of tonal stability in the Humoristic Suite and the Third Symphony, or the increasing network of cross references in the Pirates. Now we will focus on the notion of telos, a characteristic diachronic element, and how it is served by two cyclic principles in Papaioannou's music.

2. Cyclic principles and the notion of telos

2.1. Large-scale thematic and serial recurrences

The association by the listener of today of a large-scale thematic return with the notion of telos can derive from his previous aural experience of multi-movement cyclic works of the post-Beethoven period, such as Schumann's Carnaval and Papillons.[13] Moreover, this association can be seen as a large-scale projection from the part of the listener of the idea of thematic return as a structural factor in 'rounding off' the form in various traditional Western ternary formal designs.

At least in terms of compositional intention, for Papaioannou large-scale thematic recurrence acts as a parameter of rounding off the overall form – it is worth noting that Papaioannou knew well Schumann's music from very early, since he played two of his works for piano in his final recital for his diploma in piano in 1934.[14] Example 5 exemplifies how this aspect holds for two stylistically and structurally different multi-movement works: the tonal Sonata for Violin and piano of 1936 and the twelve-note 12 Inventions and Toccata for piano of 1958. In these instances, large-scale thematic reappearance initiates what proves to be the concluding section of the piece. A more sophisticated and extended version of the same idea is discerned in the Suite for violin and piano of 1954: in the rondo-type design of the last movement (the seventh), the episodes reiterate literal material from the first, material which has not been heard again in its initial form during the piece.[15]

Example 5

Large-scale thematic recurrences

5a. Sonata for Violin and Piano (1936)

I. Moderato

III. Presto

5b. Inventions and Toccata for Piano (1958)

I. Lento

XII.

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In Papaioannou, the conceptual basis of this element, the literal recurrence of the opening material as an indication of a concluding process, can be also discerned on different levels of the serial structure in some of his twelve-note works. Example 5b demonstrates how, for example, in the Inventions the large-scale reprise of the thematic appearance of the twelve-note series is heard on the initial pitch level. This aspect of formal articulation is also discerned on a smaller scale: in four Inventions (II, III, VII and IX) thematic recurrence of a serial form on the pitch level of its first appearance rounds off the overall form, while in another four (I, VII, X and XII) the opening serial structure recurs at the end, although this association is not delineated by thematic reprise. However, all of these serial structures raise the problematic issue of their aural perception by listeners who do not possess perfect pitch, a problematic aspect that is further strengthened by the fact that the serial process between the two theoretically associated sections do not raise structurally the expectation of return to the initial pitch level. In other words, the way that these structures are experienced is quite different from thematic returns to the tonic region which have been structurally prepared by the normative functions of the tonal system, even in the cases in which these returns are considerably modified.[16] This is the reason why it is only within these functions that we can talk of returns and not only of reappearances or recurrences as we did with reference to the serial structures.

2.2. Combination of previous events in the last formal stretch

Similar critical reservations hold for another cyclic aspect that in Papaioannou's music is variously associated with the notion of ending: the recollection and combination of previously separately developed elements in the last formal stretch. In terms of serial structure this issue is exemplified by the Toccata of the 12 Inventions and Toccata and the last, ninth movement of the String Trio of 1963. In both cases the last formal section reutilizes all the serial types that have been used separately in previous movements.[17]

The sketches of the Third Symphony demonstrate that this idea was also central in Papaioannou's preparation of the thematic plan for the whole work: he notes under the superimposition of themes of different movements that this is destined for the finale. More generally, for Papaioannou's finales holds what L. Somfai has noted for those of Bartók: that 'their meaning can be interpreted correctly only in connection with the preceding movements' (Somfai, 1969: 393).

Let us see different realizations and structural implications of this element. In the last Rondo movement of the First Symphony of 1945 the episodes are based on the elaboration of thematic ideas of the previous movements, as has pointed out by Georges Kokkonis (Kokkonis, 1999), possibly depicting Papaioannou's intention for a climactic finale of a heroic and apotheotic character, as it is expressed in the programme note for the work.[18] The juxtaposition of thematic elements as an aspect of large-scale closure is also detected in twelve-note works, such as in the coda of the Sonata for piano of 1958. Moreover, in the ballet Pirates, the juxtaposition and superimposition of motivic fragments possibly functions as a musical metaphor of the presence of all heroes on stage. Although it is not evident in the previous instances, the Hegelian notion of large-scale integration can be read behind many motivic realizations of this aspect, such as those demonstrated in Examples 6a and 6b. In these cases, the main motives are coordinated within a new environment (the cadential process in the Gavotte from the Humoristic Suite and the tonic major in the Sonata for violin and piano); this new context 'absorbs' the differences of their first appearances within a new unity, reflecting (especially in the Sonata) the Hegelian notion implied

Example 6a

Humoristic Suite, Gavotte, bb. 15-16: Motivic combination

Example 6b   The end of the Sonata for Violin and Piano (1945): Motivic combination

by Papaioannou's handwritten note of 1954 that 'Form is the articulation of elements towards a unified whole (or towards a "higher unity")'.[19] Finally, a quite different realization of the notion discussed is found in the finale of the Imaginary Dance of 1948: this finale combines elements that have been contextually associated with the idea of telos during the piece, since they appear (separately) at the final stretches of the small sections that comprise the overall form.

Pirates, VIII: Material derived from previous tableaux

Bars	Source
3	r.h.: I, b. 15ii, rhythm and contour
5–6i	r.h.: III, b. 18, transposed
7–8	l.h.: III, bb. 4–8 ostinato, pitch identical, rhythmically varied r.h.: III, bb. 4–5ii/r.h., varied
10	r.h.: III, bb. 7iii–8/r.h., varied
13–15	l.h.: III, bb. 15–32 ostinato, pitch identical, rhythmically varied
17	r.h.: III, b. 18 , transposed, varied
19–24	l.h.: III, bb. 15–32 ostinato, pitch identical, rhythmically varied
26	r.h.: III, b. 9/r.h., varied
28	r.h.: III, b. 9/r.h., transposed, varied
32ii–33	r.h.: I, bb. 15ii–17i, transposed, varied
34	r.h.: III, b. 18, transposed, varied

Epilogue

Conclusively, the idea of the cyclic form offers an important tool in understanding a common thread within the stylistic evolution of Papaioannou. Moreover, the various realizations and extensions of the notion by Papaioannou demonstrate interesting twentieth-century transformations of a characteristic nineteenth-century aesthetic idea. Finally, it is interesting to note how elements of the cyclic notion are projected in Papaioannou's overall stylistic evolution. Firstly, through the recurrence of the stepwise melodic figure as an important motivic element in the cyclic processes of all three works covering a period of a decade which were discussed with reference to Example 1. Secondly, the notion that the end has to encapsulate and combine past elements is suggested by the sketches of his last work, a Concerto for piano, which was left unfinished.[20] The twelve-note series that Papaioannou employed, or intended to employ, comprise those of two important works of his of 1962 and 1973 (the Concertino for piano and string orchestra and the Double Concerto for violin, piano and orchestra), and also the combinatorial series of Schoenberg's Fourth String Quartet, which might had influenced the use of combinatoriality in his own music, since he incorporated this element only after his own analysis of Schoenberg's work.[21] Thus, although being unfinished, this Concerto might be seen as providing, in an admittedly abstract way, the notion of telos in Papaioannou's stylistic evolution, analogously to the thematic combinations at the finales of his music.

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References

Chardas, Kostas (2006), 'Yannis A. Papaioannou: The Piano Music up to 1960'. PhD thesis, University of Surrey.

d'Indy, Vincent (1912), Cours de composition musicale, Premier livre. Paris: Durand.

Kaminsky, Peter (1989), 'Principles of Formal Structure in Schumann's Early Piano Cycles'. Music Theory Spectrum, Vol. 11, No. 2, pp. 207–225.

Kokkonis, George (1999), 'The First Symphony of Y. A. Papaioannou'. Paper delivered in the Conference Issues of Neohellenic History of Music, Ionian University, Department of Music Studies, Corfu 26–28 November 1999. Available: http://www.ionio.gr/~Greekmus/anakoinoseis/kokkonis.htm (In Greek).

Macdonald, Hugh (2001), 'Tranformation, Thematic' in Macy, L. (ed.), Grove Music Online. Available: http://www.grovemusic.com (Accessed 20 July 2006).

Meyer, Leonard B. (1991), 'A Pride of Prejudices; Or, Delight in Diversity'. Music Theory Spectrum, Vol. 13, No. 2, pp. 241–251.

Moschos, Kostas and Xanthoudakis, Haris and Deniosos, Anargyros (1999), Yannis A. Papaioannou: Complete Catalogue of Works. Athens: Philippos Nakas The Music House.

Papaioannou, Yannis (1966), 'Imagination, Thought and Technique'. Chronicles of the Greek Society of Aesthetics, Annual Bulletin of the Greek Society of Aesthetics 1966, pp. 94–106. (P.A., File 'Lectures'). (In Greek).

Papaioannou, Yannis (1975), 'The Artist in his Studio'. Unpublished lecture given on 23 April. Thessaloniki, 'Techni' Art Society. (P.A., File 'Lectures'). (In Greek).

Rosen, Charles (1995), The Romantic Generation, Based on the Charles Eliot Norton Lectures. Cambridge, Massachusetts: Harvard University Press.

Somfai, L. (1969), '"Per Finire": Some Aspects of the Finale in Bartok's Cyclic Form'. Studia Musicologica Academiae Scientiarum Hungaricae, T. 11, Fasc. 1/4, pp. 391–408.

Whittall, Arnold (2001), 'Leitmotif' in Macy, L. (ed.), Grove Music Online. Available: http://www.grovemusic.com (Accessed 17 June 2005).

Notes

[1] Most of the documentary material regarding Papaioannou's biography and music is located in Papaioannou Archive (thereafter P.A.), which is part of the Historical Archives of the Benaki Museum in Athens. For the programme notes under discussion see P.A., File 'Analytical Notes'.

[2] Papaioannou's copy of d'Indy's treatise can be found in Papaioannou Library, which is kept in the Department of Music Studies of the Ionian University.

[3] These ideas are particularly developed in the chapter 'La Sonate cyclique' (d'Indy, 1912: 375–434).

[4] See Papaioannou 1966 and 1975. The first was completed in 1965 and first given as a public lecture in 6.4.1965.

[5] See Macdonald 2001 for a concise overview of the various compositional realizations of the idea of thematic transformation in the nineteenth century.

[6] For a concise discussion of the cyclic form in the nineteenth century see also Rosen, 1995: 88–92.

[7] See P.A., File 16. See also the sketches entitled 'Matériel' in P.A., File 18; according to my view these sketches are for the Third Symphony and not for the *Concerto for Orchestra* of 1954, although they bear the title 'CONCERTO POUR ORCHESTRE', since they refer to the thematic structure and content of the Third Symphony.

[8] According to the most recent publication of the Catalogue of Papaioannou's works, Papaioannou divided his own stylistic evolution as follows:
a) 1932–ca 1944 Impressionistic trends;
b) ca 1944–1952 Approach to Folklore and the Greek 'National School', use of elements of Byzantine music;
c) 1953–1965 Twelve-note system and 'recent techniques';
d) 1966–1989 'Entirely personal style' (Moschos/Xanthoudakis/Deniosos 1999: 7). A critical approach to this scheme taking into account the conclusions of analytical research to works up to 1960 is pursued in Chardas 2006.

[9] For example, in its appearances in the first bars of Rehearsal letters B and D and E.

[10] The ballet *Pirates* became better known in its version as a piano suite entitled (by Papaioannou himself) *Corsair Dances*, comprising only some of the movements of the ballet.

[11] See P.A., File 'Analytical Notes'.

[12] Seven out of the eleven tableaux of the piece centre on D-rooted triads.

[13] See Kaminsky 1989 for a discussion of this and other structural formal aspects in Schumann's early music.

[14] He played the *Carnaval* and the Concerto for piano. See P.A., Box 'Biography A'.

[15] Bars 41–42 of the Finale reiterate bb. 10–11 of the Prelude, while bb. 10–27 of the Prelude reappear in bb. 67–83 of the Finale (with the exception of bar 20).

[16] An example of this is the rhythmically modified return of the opening gesture at the coda of the *Allegro en forme S dithématique* of 1934, an early tonal piece.

[17] The Toccata brings back all the reordered serial forms, and the ninth movement of the String Trio reutilizes the three serial types that have been used separately in previous movements.

[18] See P.A., File 'Analytical Notes'.

[19] This note is situated in Papaioannou Library.

[20] See P.A., File 38.

[21] Papaioannou's copy of Schoenberg's work bears 1958 as the date of acquisition; Papaioannou employed for the first time an inversionally combinatorial series in his String Quartet of 1959.

Santrauka

Skirtingi stiliai – viena gija: ciklinės formos ir principai įvairiuose graikų kompozitoriaus Yannis A. Papaioannou stilistiniuose laikotarpiuose iki 1965 m.

Cikliškumas, kaip priemonė formos vienovei sustiprinti, atspindi visą savarankišką Y. A. Papaioannou (1910–1989) kūrybinę veiklą nuo mokymosi laikų, kai jis nuodugniai studijavo V. d'Indy „Kompozicijos vadovą". Šis bruožas išryškėjo jau ketvirtojo dešimtmečio pirmųjų daugiadalių kūrinių dalių teminiuose ryšiuose bei pasikartojimuose ir išliko svarbiausiu jo muzikos bruožu iki pat 1965 m., nepaisant to, kad kompozitoriui keičiant stilių, kuriame iki tol vyravo tonalumas, jau nuo šeštojo dešimtmečio pradžios jo muzikoje palaipsniui įsivyravo dodekafonijos elementai.

Šiame pranešime, analizuojant skirtingų laikotarpių kūrinius, nagrinėjami įvairūs ciklinės formos realizavimo būdai ir jų struktūrinės potekstės, pvz., laipsniško medžiagos perkomponavimo sąsajos su sceniniu veiksmu balete „Piratai" (1952). Be to, atkreipiamas dėmesys į du ciklo aspektus, susijusius su *telos* sąvoka: į pradinės medžiagos pasikartojimą ir prieš tai buvusios medžiagos derinius (perkėlimus arba sugretinimus) baigiamojoje formos dalyje. Šie du aspektai išryškėja skirtingose struktūros vietose ir skirtingais lygmenimis:

1) teminės medžiagos sugrįžimuose stambiu mastu: „tonalioje" Sonatoje smuikui ir fortepijonui (1936) ir dodekafoninėse Dvylikoje invencijų ir tokatoje fortepijonui (1958), taip pat naujame anksčiau skambėjusios teminės ar motyvinės medžiagos kombinavime: „tonaliame" *Scherzo* (1938) ir dodekafoninės Sonatos (1958) baigiamojoje dalyje;

2) serijinėje kai kurių kompozitoriaus dodekafoninių kūrinių struktūroje (sugrįžimas prie pradinės serijos sąlygoja ir lokalinę, ir visuminę formos išraišką, o baigiamojoje dalyje panaudojamos visos serijos iš ankstesnių dalių).

Pranešime taip pat kritiškai įvertinamas šių serijinių struktūrų girdimasis suvokimas.

Rimantas Janeliauskas

J. S. Bach's *Well-tempered Klavier* (WTK, I) as a Monogramic Cycle

J. S. Bach's *Well-tempered Klavier* (WTK, I) unfolds itself as a cyclically structured work. Musicologic thought usually perceives this work as a certain collection of preludes and fugues. Here is one of its definitions: "The best known Bach's klavier work is undoubtedly a two-part cycle of preludes and fugues *Well-tempered Klavier*" (*Das Woltemperierte Clavier,* 1722 and around 1740; later referred to as the WTK). Each of its two parts includes 24 preludes and fugues and embraces all 12 major and 12 minor keys. Volume I of the WTK is better prepared and stylistically more integral (volume II contains some compositions written in different periods)". Nobody has, however, attempted to get a deeper insight into the regularities of the whole cycle. Musicologists limit themselves to the analysis of separate preludes and fugues. The relationship between preludes and fugues has not been more thoroughly studied either.

Here we are going to analyse volume I of the WTK, because we suppose that volume II structurally forms a separate cycles.

The structural core of volume I of the WTK cycle consists of the thematic inversion of the prelude and Fugue in C major (Example 1). The bass line of the prelude forms the fundament of a

Example 1

harmonic figuration (the intervals of thirds prevail). Sequential progression combinations of chords are peculiar to the development of bass. In its turn, the fugue theme is constructed absolutely differently (intervals of seconds prevail) and its expansion is based on the imitation of the theme in different voices. Therefore, the prelude and fugue get separated in harmonic and melodic respect. These two alternatives become the most general source of the thematic expansion of the cycle. Here the conception 'thematic' embraces not only a melody in its narrow sense but also the bass of harmony, the type of tesiture (homophony, polyphony) and the character of development (sequence, imitation). It is these intercorrelating elements that form a thematic outline of the cycle. Noteworthy is the relationship of the incipiences of the first three preludes and fugues (C, c, C-sharp). The rising figuration of chord in C major (Prelude I) turns into that of a falling C-sharp major (Prelude III). Something similar is constructed with the fugues in respective keys. The rising line of the theme (Fugue I) becomes falling (Fugue III). In its turn, the prelude and fugue in C minor, intervening between these alternative incipient pairs, are marked by a constant waving between different intoning directions. The noticed relationship of incipiences are presented in the following scheme:

Scheme No 1

Prelude	Fugue
↑ (C)	↓ (C)
↑↓ (Cm)	↓↑ (Cm)
↓ (C-sharp)	↑ (C-sharp)

(In Scheme No 1 one can notice the types of intoning directions: raising↑, falling ↓, waving↓↑.)

The thematic outline of initial three preludes and fugues conform with the key plan. An intermediate one-named (C minor) can be seen intervening between different major keys (C and C-sharp or enharmonically identical D-flat). In its respect, the future key (C-sharp or enharmonically identical D-flat) is associated by a functional link of the Neopolitan subdominant (sound D-flat in C minor is related to the lowered second, i. e. the Neopolitan degree). Thus C minor in a way fulfills the function of a common structure ("chord") between unrelated C and C-sharp (D-flat) keys. This model of alternative keys and that of a transitional one consistently, to be more exact, sequently recurs throughout the course of all the preludes and fugues and breaks only in its 12th chain. The last chain of the sequence is not full (B-Bm). However, having in mind the cycle's beginning (C), there seem to be as if no reasons for the cycle to end, and everything could rather go on recurring in an endless sequency. The WTK I boundaries are usually motivated by the exhaustion of 24 keys. In harmonic-key respect, however, the cycle is finished by the position held by the last of the keys. After the sequence reaches its last 12th tempering degree, i.e. B minor is a Lydian dominant for the future main key. It is this point where two functions of alternative harmony (the Neopolitan subdominant and the Lydian dominant) enharmonically blend. This is the end of the sequential cycle of the keys or the completness of the plan of the keys.

This sequential cycle's tonality is also articulated at a higher level embracing eight pairs of preludes and fugues by a single macrosequential chain. In this way, the whole cycle falls into three macroconsequential the divisions of each of them are expressed by consistently rising four-tone groups (c-cis-d-es, e-f-fis-g and as-a-b-h) with appropriate major and minor keys.

The second division can be easily recognized due to the incipients of its first three positions (IX, X, XI). The preludes clearly vary the sequence of a thematic model known to us – the rising, intermediate and the falling incipient intonation. An ostinatic bass figuration, which will easily remind of a prototype (Prelude II), is particularly important to the minor prelude (Prelude X). The transformations of fugue themes in comparison with primary models (prototype) are more intricate but recognizable. The accent falls on the middle of a tessitura ambit (Fugue IX), the ostinatic eights seem as a continuation of the prototype (Fugue X) and a leap of the sixths here is downwards (Fugue XI).

The characterization of the third macroconsequential division depends on a more detailed analysis of the first and second chains.

The first division of the 8ths sets the numbers of their pairs in the manner of inverse or concentric symmetry. In this way, the triad of primary numbers reflects its incipients through mirror symmetry at the end of the division. Thus, the incipients of number III are varied by VI. The preludes of respective numbers are marked by a falling harmonic figuration, the themes of fugues – a leap through a sixths down. Analogically follow II and VII. Preludes are marked by a "vibrating" ostinato of the sixteenth, the fugues – a "twitching" phrasing of themes. I and VIII – rising harmonic figurations and suspensions as well as syncopes in the themes. The most contrasting positions in respect of musical character and tempo intervene in the middle of the 8ths sets (here one can agree with B. Mugellini's editing additions). The preludes of these members, however, interrelate due to the filling of the harmonic figuration with second slides, and the melodics of fugue themes exploit the leaps of harmonic intervals. Here we can see a certain reciprocity of thematic (prelude-shape and fugue-shape) material and intervalics.

The concentric structure of the primary section guarantees a certain closed and expositional character of this division.

The second division of the 8ths sets is marked by a certain functional orientation. The primary phase of the division, as we have already noticed, bears an evident similarity to a thematic model of the cycle's three first positions. The end of the model coincides with the functional position of the subdominant (XI, F). The second phase of the section starts from here (XI–XIV). Finally the third phase (XV–XVI) coincides with the keys of the dominant's function (G, Gm).

One is curious to know what justifies this kind of functional grouping of movement positions into phases. Most likely the easily recognized version of textural-thematic shapes? Let us concentrate our attention on the climax position (XV) of this division, coinciding with the relationship of the cycle's golden section ($24 \times 0{,}618 \approx 15$). The dominant key of this position distinguishes itself among others by easily recognizable textural-thematic shapes. The harmonic prelude's figuration (I) easily associates with the similar elaborations of the first prelude (C), and the respective fugue's themes are akin to the slides of 2nds and the syncope of leaps.

In this section, the position (XI) of the subdominant key distinguishes itself in a similar way. Analogous in respect of variance, the prelude's harmonic figuration, although different from the earlier observed ones, begins in a falling arpège. An analogous intoning direction is also peculiar to the fugue's theme.

Intonational differences between the subdominant and dominant keys are logical, having in mind the peculiarities of the modal attraction related to the keys of the opposite harmonic functions.

A theological character is motivated by the recognizable textural-thematic shapes of the dominant's and the subdominant's keys. Every other position of the prelude of the fugue adjoins the mentioned shapes. Noteworthy is the fact that at the end of the subdominant's phase (XIV) both the prelude's figuration and the fugue's theme (see: incipient) converge in respect of their intervalics due to the prevailing of stepwise movement. Another, no less important, detail – the last dominant (G minor) position (XVI), in comparison with the beginning of this section (IX), inverts thematic intoning directions, leaving the thematic contradiction of the section unsolved.

The first two sections, each containing eight positions, could be conditionally compared to the exposition and development divisions of the cycle. The functions of the fundamental keys (tonic of section I and the subdominant ant the dominant of II) projectively in principle unfold the material that is coded in the chord progression of the first measures of the prelude in C major (m. 1–3). Here in succession sound three harmonic functions, i.e. the tonic, the subdominant and the dominant (T, S, D) (incidentally, a three-function harmony model is characteristic of the cycle's all preludes without exception). The third macrosequential chain is closer to the construction of the closing division (extended coda). Here thematic analogies with previous positions are least of all seen due to the prevailing of mixed shapes both in respect of intoning directions and intervalics. Nevertheless, some recapitulation aspects can be also noticed. The fugues in the second and third sections are in 3, 4 and 5 voices and the middle section disposes the fugues in mere 2, 3 and 4 voices. It should be noted that in the development section, starting from the subdominant position, there disclose themselves regularities in the range of the fugue voices – 3-4-3-4-3-4 (see: XI–XVI), which coincide with the sequence of the major and minor keys. The third section opens with the XVII the position whose both prelude and fugue incipients are marked by harmonic intervals (third prevails). It is the further stage of interrelations of melodic and harmonic intervals after the unification of the incipients in the XIV position.

The cycle's last prelude in B minor is distinct through a second-step bass figuration, whereas the fugue theme is permeated with harmonic intervals of thirds and sixths. It is cardinally an opposite distribution of intervals in comparison with that seen in the cycle's first position (I). This kind of inversion of the prevailing harmonic and melodic intervals in the cycle's lateral positions (I and XXIV) is a consistent result of a combinatory process and a significant criterion of the cycle's completeness.

Some 300 years later, after the creation of the WTK I and the scrupulously taken to pieces preludes and fugues, today still remain unsolved cyclic form riddles. One of them the WTK I monogram system.

The monogram BACH cannot be evidently seen in the sounds of the cycle. It is simply deciphered in a certain way. It can be supposed so at least on the basis of the fact that the monogram has never been disclosed. It is however quite possible that the great German composer did not even make an attempt to specially decipher something but simply exploited the monogram in his own way.

The monogram BACH is expressed by means of the intonation of sounds and is exploited in the cycle in a transposed, inverse, permuted, segmented and the like shapes. The core of the monogramic system of sounds is constructed by two alternative and one derivative shape of the sequence of BACH elements (Example 2). The alternative intonation sequence emerges by way of

Example 2
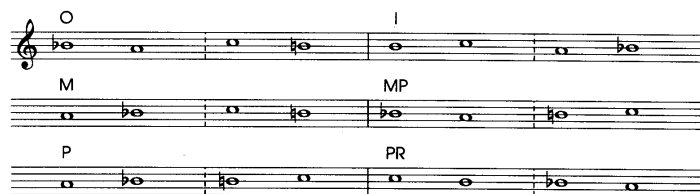
the permutation of literal symbols of sounds. In this way, the original sequence (O) is permuted (P). Between these two shapes of monograms intervenes an intermediate mixed one (M) the elements of which are only partly permuted. Thus, Bach (O), ABHC (P), ABCH (M). The mixed sequence with its two elements (AB) coincides with the permutation and with the last ones (CH) – the original.

Each of the shapes has inverse versions. The pitches of the original sounds, reflected through mirror symmetry, mark its inversion (I), the reverse permutation version – a retrograde (R), and the alternation of the mixed-shape pairs of elements (MP). It easy to notice that the alternative monogram shapes have no other reverse shapes (because I = R, and R = I). Due to transpositions any attempts to derive more mixed (M) forms get levelled in a similar way. Each of here established shapes, be it primary or inverse, is articulated by two-sound segments — the first pair, the second pair, e. g.: O = BA and CH, I = HC and AB; P = AB and HC, PR = CH and BA, finally M = AB and CH, MR = BA and HC.

Each monogram's segment can be transposed on all tempered sound pitches. They can be also distanced from each other in respect of time – within the range of the measure phrase. The monogram's segments can be distributed between different voices and get woven into a harmonic figuration. Segmentic combinatorics of the monogram is partly reflected in the WTK ciphergram (Example 3).

Example 3

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In respect of the cycle's integrity, the ciphergram reveals several noteworthy things. B. R. Hanning in his book "History of Western Music" describes a fragment of the authograph from J. S. Bach's WTK, I, Prelude in C major (m. 21–24) as follows: "Carl Czerny (after 1830) apparently based himself on the copy made after Bach's death; here after measure 22 a non-authentic measure intervenes; [in addition Czerny inserted phrasing, tempo and dynamics references which are not indicated in Bach's manuscript (e. g. *diminuendo* in measure 21)]. Hans Bischoff in the 1883 publication made an attempt to present material as exactly as possible. [Present-day publishers also stick to the same principle, sometimes facing certain practical hardships]" (Hanning, ibd.). One can but guess what prompted C. Czerny (Beethoven's teacher!) and his predecessors to add an additional measure. It might have been an unusual bass slide (F-F-sharp-G-A-flat). The golden proportion section crosses almost the middle of the slide between F-sharp and A-flat. (We find it out from the prelude's measures and the relationship of the golden proportion coefficient: 35 x 0,618 = 21,63.) We think that in this way Bach exposes for the first time one of the shapes of the cycle's monogram (M, transponed from the sound *f*; Example 4). The seriousness of his intention was shortly after proved by the theme of the Fugue in C major (Example 5). The primary and final accents of the theme express monogramic segments (F-E, F-sharp-G, m. 1, 3) through a distance. Here we can recognize the reverse version of the mixed shape (MP from sound *f*) seen in the culmination of the Prelude.

Example 4

J. S. Bach's autograph

C. Czerny's publication (after 1830)

H. Bischoff's publication (1863)

Example 5

Successive positions of the preludes and fugues unfold this intention. At the beginning of Prelude C minor imperceptibly "dashes" an original monogramic shape (Example 6). It is completely blended with a harmonic figuration of the right hand (O, from *es*, m. 1–2). The "weaving" of the monogram into this "motor" rhythmic context may seem accidental. It most likely does not determine anything. But the employment of the monogram marks the prelude as if an authograph. It is also impossible to negate a constructive relationship – the theme of the Fugue in C minor illustrates an inverse version of this "authograph" (I). It is true that the inversion segments are distanced through intervals (B-C, G-A-flat, instead of A-B-flat, Example 7). [After the comparison of the thematic expositional model of the first three preludes and fugues with the monogram one could expect something similar.] Indeed, the third position (C-sharp major) lists an alternative

Example 6

Example 7

monogram shape (P). At the beginning of the prelude it sounds at the bottom and of the fugue – at top. Here a monogramic shape is hardly legible for the reason of the double distancing of semitone segments. Their disposition embraces the entire phrase (theme), besides, they correlate at a fifth (E-sharp-F-sharp, B-sharp-C-sharp). It may be the reason why this form is identical both to the prelude and the fugue (in the fugue we cannot see the version of a reverse shape alike in the previous one). A reverse relationship of the prelude and the fugue with a permutable monogram version emerges later, i. e. in X position. The chromatically rising four-sound slide at the end of the Prelude in E minor (A-B-flat-B-C) is balanced by the falling intonation of the fugue theme (D-sharp-D-C-sharp-C). Besides, the fugue is exceptional – double-voiced, the only in the cycle. One may ask why the composer began his cycle in transposed monogram forms, to be more exact, without exploiting the authentic BACH sounds. By appearance, it looks more like the coding of his intention. So where is the original non-transponed monogram version? The searched for "catch" (BACH) sounds almost once within the entire cycle – in measure 26 of the Fugue in D minor (Example 8), i. e. in the area of the golden section (m. 44 x 0,618 ≈ 27).

Example 8

The symbolic importance of this monogramic projection happily clears up. Whereas the key of D minor is evolutionally associated with the Dorian tone of the modal system called toni primi.

This key is not only Bach's favourite (let us recollect the most celebrated works – Chaconi, Chromatic Fantasia and Fugue, Tocatta for the Organ, etc. written in this key) but also associates the majesty of the Renaissance polyphonic epoch. Thus, the authentic record of the monogram sounds in the "heart" (golden sections) of the Fugue in D minor contains a hidden depth of the implied sense in the context of old polyphonic and new homophonic epoch. In respect of the monogram, symptomatic is not only the fugue but also the Prelude in D minor. In culminating measures (m. 22–23) emerges a chromatically falling sound chain of diminished triads (Example 9).

Example 9

In the end (m. 23) one can read the permutation of the authentic monogram sounds (C-H-B-A). Particularly rich in a harmonic aspect is the minor not only due to its top modally varied tetrachord, creating preconditions for chromatic slides, but also due to the possibilities of the diminished chord to become a plastic springboard for a new system of tempered sound keys. Here the chromatic and original monogramic shapes of the Prelude and the Fugue in D minor rather openly manifest themselves as alternative to each other.

Now one can better perceive the manifestation of the derived mixed monogramic shape (M) at the beginning of the cycle in the Prelude in C major. The prelude represents not only a new homophonic-harmonic style but also the first key of the new sound system. (The Renaissance theorist G. Zarlino seems to be the first to motivate the priority of the Ionian mode.)

It is noteworthy that the intermediate monogramic shape (M) of the Prelude in C major conceptually associates an universal chromatic scale with an authentical monogram intonation. Most likely, it served for the composer as a stimulus to start the cycle in an intermediate, modified shape of the monogramic sounds. Incidentally, not only to start but also to return. The intermediate monogramic shape returns through a tritone distanced position (XIII). It is a symptomatic sign reinforcing the "well-tempered" harmony. And particularly because of the fact that its mixed shape and permutation exchanged places with the prelude and fugue. Thus at the beginning of the Prelude in F-sharp major (M. 1–4) we can see MP (from B) and within the range of the fugue golden section (m. 25) cuts in M (from A-sharp), but with a delayed second sound B and the segments distanced at a third (Example 10). This inversion with the first cycle's position (I) properly synchronizes, besides, with a closed circle of fifths (we mean a rising and falling intercouse of the fifths chain up to the sound F-sharp (G-flat) on which the tempered sound system is based.

Example 10

Another conceptual monogramic inversion can be seen in the final position of the cycle (XXIV). In the culmination of the Prelude in B-minor (m. 37–38), again within the range of the golden section (incidentally, when counting the golden section, the measures of the repeated parts of the prelude should be taken into consideration), we can see an intermediate shape (M) based on authentic monogram sounds (Example 11). Hence, the authentic monogram sounds return in a

Example 11

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mixed monogramic form at the end of the cycle, and in this way as if end a monogramic conflict coded in the Prelude and the Fugue in D minor. There (VI), as we have seen, alternative forms (P and O) manifested themselves in authentic sounds. It is symbolic that this mixed form appears at the end of the cycle in the minor key and the prelude melody in comparison with the major prelude at the beginning of the cycle, where a similar form displayed itself in a transponed form in bass. Thus, we can discern here certain cycle-framing link-ups as well as the semantics of tonal and modal harmony systems.

Worthy of mention is an articulatory regularity related to the authenticity of the monogram sounds. The intonations of the sounds BACH appear once in the cycle's each 8-position section. In section the first (I–VIII) the sounds BACH can be seen in the Prelude and Fugue in D minor (PR and O), in the second (IX–XV) – Prelude in E minor (P) and the third (XVI–XXIV) – the Prelude in B minor (M). It should be noted that authentic monogram shapes sound at the end of the sections (first and third) or at the beginning (second). On the other hand, transpositional monograms with C major and F-sharp major positions, as we have noticed, embody the dualism of the cycle.

How does the composer finish this monogramic cycle? In one of his articles, the German musicologists J. Mainka writes that the theme of the final Fugue in B minor from the WTK I, consisting of all 12 sounds, is a united result of the cycle's all fugue tonics (Mainka, 1969). This thought is absorbing. But is it exact enough? The positions of the cycle are distributed in a rising order of a chromatic scale. However, such a plan of tonics finds no reflection in the Fugue in B minor. Its melodic profile is marked by a broken line. New sounds emerge beside sometimes recurrent ones. On the other hand, it is not likely that twelve different tones functioning in the theme are simply a summary accumulation of tempered sounds.

A more perspective seems to be a monogramic glance at the theme.

The fugue theme is comprised of the original and inverse monogram shapes (Example 12).

Example 12
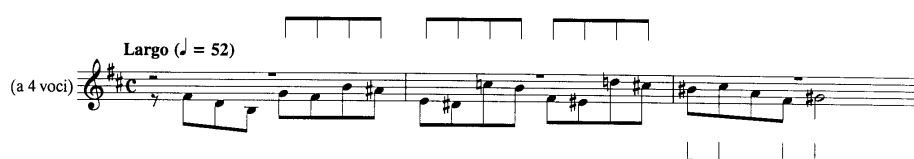
These shapes are transponed and their pair segments of sounds are distanced from each other at the interval of the major third or minor sixths. Thus, the theme shows three successive original shapes (G-F-sharp-B-A-sharp, E-D-sharp-C-B and F-sharp-E-sharp-D-C-sharp) and at the end – the inversion of this shape (B-sharp-C-sharp-G-sharp-A, but with the previously anticipated third sound *a*). And so, the structure of the theme discloses variance (transpositional, segmental) and a closed character, structuring inversion of the original intonation at the end, whereas all the 12 tempered sounds exploited in the theme are most likely a mere precondition for the manifestation of these diverse monogramic modifications. A monogramic approach to the theme of the Fugue in B minor makes possible to productively associate it with the cycle's whole structure and its key plan. The three sections of the cycle and their key tonics, based on four different chromatically rising sounds, can remind of the composer's monogram macropermutations (Example 13). Thus

Example 13
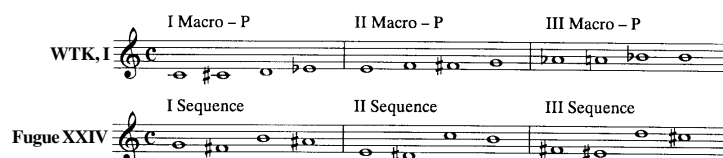
each section disposes a certain transposition of permutation form – section I: C-D-sharp-D-E-flat; section II: E-F-F-sharp-G; and section III: A-flat-A-B-flat-B. As we have noticed, an alternative shape to permutation is an original monogram sequence. This kind of shape can be observed in the fugue theme transpositionally repeated three times (I: G-F-sharp-B-C-sharp, II: E-D-sharp-C-B; III: F-sharp-E-sharp-D-C-sharp). Hence, the major plan of the macropermutations of the three

sections is reflected in the theme by means of an alternative way. Similar micro- and macro-reflections are characteristic of the cycles. For example, a harmony progression legalizes itself in inverted order in the key plan and the like.

Noteworthy are also intonational directions of short introductions to the theme (F-sharp-D-B) and their ends (B-sharp-C-sharp...G-sharp-A). They are opposite, creating an allusion of question and answer. It is just this peculiarity that brings the theme to a complete close. We have noticed something similar on the scale of the whole cycle, comparing intonational directions of the first preludes in C major and the last in B minor.

The analysis of J. S. Bach's WTK I can be endlessly continued, however, our observations are sufficient for the argumentation of this work as a monogramic cycle.

References

Hanning B. R. *Concise History of Western Music*, 2000, p. 309.

Riemann H. *Musik-Lexikon* (Sachteil: 309, 745).

Mainka J. *Frühe Analysen zweier Stücke aus dem Wohltemperierten Klavier*, In: Musa-Mens-Musici. Im Gedenken am W. Vetter. Hrsg. vom Institut für Musikwissenschaft der Humbolt-Universität zu Berlin, Leipzig, 1969.

Santrauka

J. S. Bacho *Gerai temperuotas klavyras* (I) kaip monograminis ciklas

Praėjus kone 300 metų po GTK I sukūrimo ir tyrinėtojams skrupulingai išnarsčius preliudus ir fugas, šiandien dar lieka neįmintų ciklinės formos mįslių. Viena jų – GTK I kriptograminė sistema.

Akivaizdžios monogramos BACH cikle nepastebėsime. Ji užšifruota tam tikru būdu. Šitaip galima manyti bent jau dėl to, kad monograma niekada nebuvo atskleista. Tačiau galimas dalykas, kad didysis vokiečių kompozitorius net nebandė ko nors specialiai užšifruoti, o tiesiog naudojo monogramą savitu būdu.

Monograma BACH cikle naudojama transponuotu, inversiniu, permutuotu, segmentuotu ir kitokiais pavidalais. Monograminės garsų sistemos branduolį sudaro du alternatyvūs ir vienas išvestinis BACH elementų sekos pavidalai. Alternatyvi intonacijos seka gaunama sukeičiant garsų raidinius simbolius vietomis. Tokiu būdu originalioji seka (O) permutuojama (P). Tarp šių dviejų monogramos pavidalų įsiterpia mišrus tarpinis (M), kurio elementai tik iš dalies permutuojami. Taigi BACH (O), ABHC (P), ABCH (M). Mišrioji seka savo dviem pirmais elementais (AB) sutampa su permutacija, o paskutiniais (CH) – su originalu. Kiekvienas pavidalas turi atvirkštines versijas.

Pravartu pastebėti ir artikuliacinį dėsningumą, susijusį su monogramos garsų autentika. Monogramos BACH garsų intonacijos kiekviename 8 pozicijų ciklo skirsnyje pasirodo po vieną kartą. Pirmajame skirsnyje (I–VIII) monogramos BACH garsus girdime Preliude ir fugoje *d-moll* (PJ ir O), antrajame skirsnyje (IX–XV) – Preliude *e-moll* (P) ir trečiajame (XVI–XXIV) – Preliude *h-moll* (M). Autentiški monogramos pavidalai skamba skirsnių pabaigoje (pirmasis ir trečiasis) arba pradžioje (antrasis). Kita vertus, transpozicinės monogramos su *C-dur* ir *Fis-dur* pozicijomis išreiškia ciklo dualizmą.

Kaipgi kompozitorius užbaigia monograminį ciklą?

Vokiečių muzikologas J. Mainka viename straipsnyje išsakė mintį, kad GTK I dalies paskutinės fugos *h-moll* tema, susidedanti iš visų 12 garsų, yra jungtinis visų ciklo fugų tonikų rezultatas.

Temoje panaudoti visi 12 temperuotų garsų, manytume, tėra prielaida įvairialypėms monograminėms modifikacijoms pasireikšti. Monograminė Fugos *h-moll* temos įžvalga leidžia ją susieti su visumine ciklo struktūra ir tonaciniu planu. Trys ciklo skirsniai ir jų tonacijų tonikos, pagrįstos keturiais skirtingais chromatiškai kylančiais garsais, gali priminti kompozitoriaus monogramos makropermutacijas. O fugos temoje alternatyviai atsispindi didysis trijų skirsnių arba trijų makropermutacijų planas. Panašūs mikro- ir makro- atsispindėjimai yra būdingi ciklams: pvz., harmonijų slinktis atvirkštine tvarka įteisinama tonacijose ir pan.

J. S. Bacho GTK I dalies tyrimą galėtume tęsti be galo, tačiau ir to, ką čia esame pastebėję, gali pakakti, kad šį kūrinį apibūdintume kaip monograminį ciklą.

Jarosław Mianowski

Wagner's *Ring* as a Musical and Dramatic Cycle.
The Semantic Unity of the Tonal Structure

The idea for the only stage tetralogy in the history of music arose in 1848, but did not mature to its full realisation until 1872, in which year Wagner completed *Twilight of the Gods* — the final part of *The Ring of the Nibelung*. Whilst the lengthy hiatus in the work's composition between the second and third acts of *Siegfried* (1851–1871), devoted to work on *Tristan and Isolde* and *The Mastersingers of Nuremberg*, resulted in a stylistic evolution, it fortunately did not disturb the cohesion of the work, the concept of which — including on the tonal level — was clearly prepared even before Wagner began to compose the tetralogy.
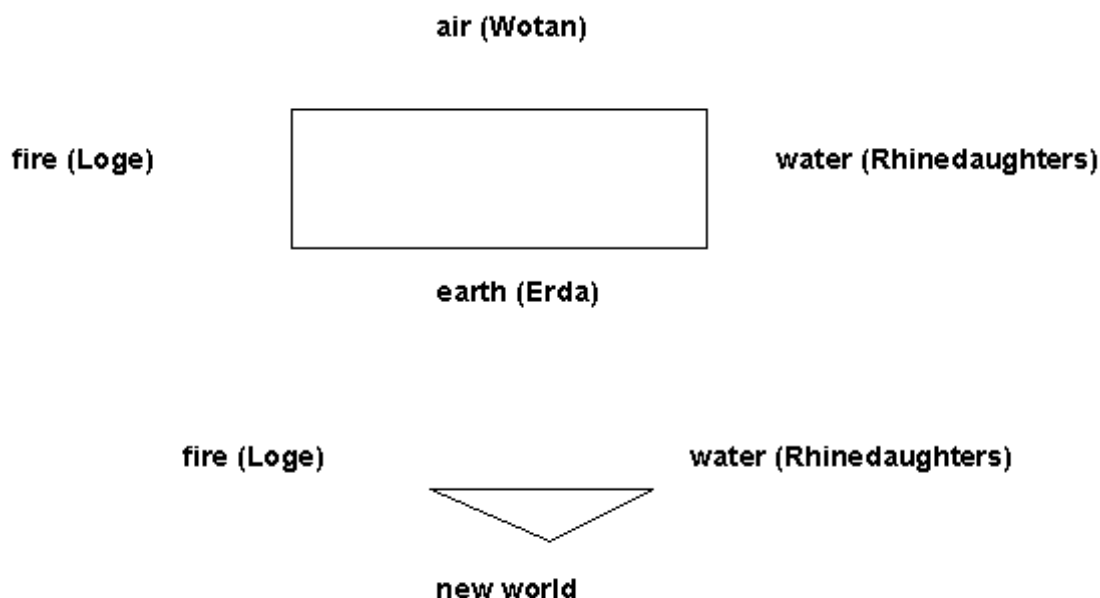
In drawing his inspiration from mythology, the composer was able to employ a vast metaphor, in which he could pass over the realistic concretisation of theatrical timespace. The intention of Wagner's symbolisation is perhaps un- or subconscious, but this does not mean that from the analytical point of view it eludes the tools of hermeneutics. The symbolic interpretation of *The Ring of the Nibelung* is no easy task. The multi-level structure of the action, the multitude of plotlines, characters and objects of a highly-charged symbolism makes their interpretation particularly difficult. Besides this, one must also keep in mind the fact that symbol cannot be elucidated entirely, since a certain margin of inexplicitness, including on the interpretational level, often distinguishes true hermeneutic investigation from banal overinterpretation, and the borderline is not infrequently very fluid.

The Ring displays a clear gradation of dramaturgical tensions. *The Rhinegold* presents a macrocosm in its original, undisturbed complexity, and also the pillars of destruction which will lead to the ultimate tragedy and at the same time provide a pretext for the further development of the work. The cosmos of the prologue contains the four elements of air, fire, water and earth, which have their specific designata in the drama: Wotan, Loge, the Rhinedaughters and Erda. The action takes place on three basic planes, representing a layered structure: the overground world of the gods, the earthly world of humans (who do not yet appear in the prologue) and the underground world of the Nibelungs, the dwarfs. This peculiar cosmology, filled with internal connections, essentially serves to restore the original order of the world, which was symbolically disturbed by Alberich's stealing of the Rhinegold. This was made possible by his renouncing of love, which triggered an avalanche of unforeseen events increasingly disrupting the Logos.

The world's tragic embroilment in the soullessness of the Nibelungs and the moral weakness of the pagan gods is to be redeemed by humans, who, renowned for their moral integrity and heroic deeds, can become worthy of the role of the gods. *The Valkyrie*, as an heroic drama, shows the complicated path of humans to the higher world, paid for with infidelity (Sieglinde to Hunding), betrayal (Brünnhilde of Wotan), incest (the amorous union of the siblings, Siegmund and Sieglinde), and finally death (Siegmund and Sieglinde). Yet the result is a positive creation: the mythical superman, Siegfried, whose cognizance of the world and heroic deeds form the subject of the drama *Siegfried*, which realises the convention of the optimistic drama. Finally, the gigantic fresco of *Twilight of the Gods* is devoted wholly to the destruction of the values and ideals set forth in the preceding parts of the tetralogy. The failure of the last chance to 'save the world' leads to the twilight of the gods and possibly, as a consequence, to the rebirth of the world of a new order, although one may doubtless advance many interpretations of the prophetic ending.

The cosmological vision of the four elements and three worlds has prompted the most disparate of interpretations. Particularly curious, yet interesting too, is the alchemic conception put forward by Tomas Brandhofe. In his reading, the representation in *The Ring* of the four elements and three alchemic principles of *sulphur* (gas), *mercurius* (liquid) and *sal* (solid) not only fulfils the role of the static presence and symbolic epitome of the laws of the world, but also possesses a dynamic function, which Brandhofe sees as essentially constituting an epitome of the esoteric sense of the work. *Mercurius*, which imparts knowledge of the world (of its four elements) and thus also of the possible changes in the world, is responsible for the transformation of the

original order of the four elements through the climactic synthesis – impossible, of course, from a 'physical' point of view – of water and fire, out of which a new world is to be born. At the same time, the elements of air and earth cease to exist according to the principles hitherto pertaining: both Wotan and Erda are annihilated, together with their ambiguous morality. These symbolic transformations can be summarised as follows:

air (Wotan)

fire (Loge)   water (Rhinedaughters)

earth (Erda)

fire (Loge)   water (Rhinedaughters)

new world

The alchemic transformations which lead from the original state of things to the finale of *Twilight of the Gods* ultimately come down to Brünnhilde's assimilation of knowledge of the world (*mercurius*) in the finale of *The Valkyrie* and to Siegfried's understanding of the world. However, these individuals must unite in order to destroy the world. So it is they who have brought about the reduction of the elements of earth and air, and their death becomes a symbol of the fusion of the elements which remain (Brandhofe, 1988: 153–159).

However, *The Ring of the Nibelung* is undoubtedly more than just a drama of the elements. Equally crucial would appear to be the motors or motives behind the actions of the protagonists, as 'flesh and blood' creatures. In *The Valkyrie*, these are love, hate and power, which symbolically govern the successive acts of the drama; in *Siegfried*, they are the hero and nature, forming a synthesis at the end of the drama; finally, in *Twilight of the Gods* we have the almost Shakespearean death of the hero and the element of tragedy, which becomes 'the vital element of the world and which derives from things themselves' (Scheler, 1954). It is in this last drama that the poetry of retrospection, at the service of which the leitmotif technique is employed, was developed most fully. Here, almost all the motifs are quoted and a series of tales are introduced – reminiscences, which at once both fashion and substantiate the tissue of the drama.

Finally, the last of the methods used by Wagner in forging the world of *The Ring* consists in the opposition between life and death, good and evil, beauty and ugliness, joy and sadness, and finally – perhaps most crucial of all – God and man. This oppositional vision, on both the aesthetic and ethical, the gnoseological and ontological, level, pervades the literary and musical world of the work. The traditional musical designata of these contrasting qualities – the minor key, the descendental melody, the tendency towards dissonance and the unresolved dissonances in the endings of phrasal structures, the low position of the voices and instruments in connection with qualities endowed with a 'minus' sign (see Treiber, 1975: 250) and the traditionally positive musical rhetoric in passages that are marked with a 'plus' – may constitute not only the point of departure, but also a sort of complement to the work's characteristic layer of symbolism.

The musical realisation of the complex structural and semantic principles at work in *The Ring* should also be seen in terms of multiple layers. The oft-raised question of the modernity of the

tetralogy's musical language, which binds the elements of the music together in a completely new way, and especially the new structural-semantic dependence of the text on the music (Lorenz's 'poetico-musical period') and its involvement in the harmonic layer, give rise to a number of new problems, which would appear to overshadow the question of the traditionally conceived non-musical signification of key, particularly given the innovative harmony that comes here to the fore, and consequently to difficulties in pinpointing the principal key, frequent key changes, or even the temporary obscuring of major-minor tonal features.

On the other hand, it becomes extremely difficult in our analysis of the links between key and the semantic domain to disregard Wagner's main method for assuring the cohesion of this enormous work, namely the scrupulously observed play of the leitmotifs which characterise the characters, symbols, situations, affective states, and so on. And yet it turns out that these calling-cards or emblems of the drama's structural components, between which arise the internal relations of linkage or change that occur as part of the motivic working (see Dahlhaus, 1987) are not the only determinants of the drama's peculiar 'musical action'. What is more, whilst the leitmotifs, being both obvious and relatively easy to grasp, are part of the external layer of the drama, conveying information on the protagonists, events and action, and at times even blatantly labelling particular 'themes', other elements, of a more implicit nature, including the 'key code', which supplements the deep layer of the work, linked to its symbolism, belong to the domain of subtext. Given the multitude of symbolic layers and their wealth of meanings, the existence of a key code seems predictable, even inevitable, although the conglomerate of symbols and harmonic complexities may cause understandable difficulties in discovering and precisely defining it.

With regard to the sphere of tonality in *The Ring*, its most external element, which attracts our close attention on the level of the work's macrostructure, is the kind of 'antiprogressive' concept of this monumental work. In this respect, there have even appeared conceptions of a purely structural nature, according to which the work as a whole would constitute an elaborate cadence in the key of D flat major – the principal key, due to the conclusion of *Twilight of the Gods* (see Lorenz, 1924). Whilst conceptions of this sort can be defended from a musical point of view, from a hermeneutical perspective they seem nonsensical. The multitude of symbolic meanings in *The Ring*, its metaphysical character and specifically dialectic antitheticity, which manifests itself, as already mentioned, in the closing synthesis of elements, precludes interpretations which as the underlying principle of tonal construction would consider only the schematic filling-in of the framework of a perfect cadence, even in the name of the key to the harmonic cohesion of the entire cycle to which this conception gives rise – a key which, given the considerable tonal ambiguities, it is obviously crucial to find.

Whilst the work as a whole leads from the opening key of E flat major to the closing D flat major, the transitional 'stations' on its way there are as follows:

The Rhinegold –	**E flat - c - D flat - b flat - A - C - D flat**
The Valkyrie –	**d - G - C - d - D - E**
Siegfried –	**b flat - D - f - E - g - C**
Twilight of the Gods –	**e flat - E flat - b - b flat - C - D flat**

I have included here, of course, only the most crucial keys, at strategic points in the work – the opening and closing acts and scenes. Even the most cursory glance at those keys which, for purely structural reasons, play a determining role in *The Ring* allows us to observe the primacy of certain keys against the complete absence of others, as well as the sufficiently evident irregularity of their distribution over particular parts of the cycle. The irregular pattern may testify the secondary role of tonal structure in the sense of the purely musical dependencies between keys or their complexes and the primary role of another element, which, in my opinion, is the semantic tonal system, which provides the hermeneutic key to an understanding of the work's symbolic message.

Let us note the general principles governing the world of tonal symbols in the tetralogy. With few exceptions, specific keys are not ascribed to particular characters in the drama, which seems understandable given the supra-individual message of the work. Only Siegfried and Brünnhilde have their specific tonal spheres, although these, too, are not entirely unambiguous and pertain

rather to the metaphysical dimension of the work. The key most frequently used to characterise Brünnhilde is D major, with C major and E flat major most often ascribed to Siegfried. Yet the complications of this pattern preclude unequivocal assignations. D major tends to be associated with Brünnhilde the Valkyrie rather than the self-sacrificing, heroic Brünnhilde; the youthful Siegfried, meanwhile, bears a different 'tonal mantle' from Siegfried the hero, for whom Wagner set aside the traditionally heroic E flat major. However, in most cases this 'parametric' vision of key propounded by H. Beckh is unacceptable and is often linked to particular persons or situations by accident, insofar as the given characters or situations consistently symbolise anything of a general, supra-individual nature (Beckh, 1937).

There is also no need to link the spheres of particular leitmotifs with specific keys, although in this case, as well, Wagner does make exceptions, associating a motif with just a single key (e. g. the sword motif, invariably occurring in the key of C major, which is hard to explain unequivocally solely with regard to the instrumentation, for example). So Wagner avoids such semantic excesses. When defining elements of the drama by means of particular motifs, he takes no pains to link them additionally through a cohesion of key. On the other hand, certain motifs, as is the case in *Tristan*, display distinctly modulatory features (e.g. the motif of fate or the motif of the magic helmet) or else act, rather more than in the harmonic or melic spheres, on the level of rhythm (e. g. the motif of forging, associated with the motif of the Nibelungs) or colour (e. g. the motifs of Loge). Thus it would be difficult to speak of the need for any cohesion of key in relation to particular motifs.

Finally, there are instances where, following a tradition derived from the times of the 15th-century 'Dutch tricks', Wagner links his favourite sequences of assonances or single words of crucial symbolic significance with particular keys on the basis of alliteration: Donner 'gets' the key of D major, Erda in *Twilight of the Gods* has E minor, Gutrune G major, Hagen B minor (German: h-moll), and keywords such as *Ende*, *ewig* and so on are given the keys of E major and E minor.

However, *The Ring*, as a work of genius, is a multi-layered creation, whose profound meanings may only be reached by means of a tonal key which is more than just a partial signifier of particular moments in the work. As I see it, the tonal point of departure in *The Ring* is the opposition between the keys of C major and D flat major, identical to the man/absolute relationship which made such a profound impression on Wagner from the beginning of his career as an opera composer. This main idea epitomises the fundamental sense of *The Ring of the Nibelung* – man's assistance in the divine 'repairing of the world' and his role in the macrocosm. This assistance is expressed essentially through the relationship of subordination of one key to another. It is D flat major that ends the work; D flat major is a sort of tonic, to which leads a sort of dominant – C major.

Yet these two keys generate two tonal spheres and a whole chain of associations, encompassing the structure of the world (the four elements), the transformations that arise between them, and also the antinomy of good and evil, understood as constructive and destructive forces, assisting or opposing the construction of the macrocosm. The realms of the human and the absolute are marked respectively in the drama by derivatives of the keys of C major (through G major and D major to the limit of sharp keys) and D flat major (E flat major being particularly prominent); minor parallels and relatives contradict the values carried by the pair of major keys. More specifically, the keys of C minor and B flat minor play a crucial role here. So, besides the opposition between the spheres of the human and the divine, one also discerns an antinomy between the positive value and its negation. In this sense, two oppositions influence the shaping of *The Ring*:

The first of these is:
D flat major (the divine element) – C major (the human element)

The second, meanwhile, is constituted by their opposites:
C major (the hero) – C minor (the hero's death)
D flat major (the Absolute) – B flat minor (the negation of the Absolute)

A third opposition, of a mediational character, may also be added:
E flat major (knowledge of the four elements)
E flat minor (its negation, the twilight of the gods)

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Another systemic feature of *The Ring* is the presence of the alchemic symbolism of the elements. The element of air, D flat major, symbolised in the first two acts by Wotan, is doubly opposed by the element of earth, symbolised by Erda (C sharp minor) and the Nibelung (B flat minor). Similarly, the element of fire, symbolised by the key of E major (the sphere of Loge in *The Rhinegold*, the magic fire in *The Valkyrie*), contrasts with the element of water, represented by the Rhinedaughters at the beginning of the tetralogy in the key of E flat major. Yet it is the same key of E flat major that symbolises eternal harmony, the order of nature, which is why the final transformation and the synthesis of water and fire in the finale of *Twilight of the Gods* occurs in this key, uniting the (fiery) motifs of Loge and the (watery) motifs of the Rhinedaughters. On the ruins of the old world, Brünnhilde pronounces the beginning of the new; the news of the rebirth of existence is symbolised by the closing apotheosis in D flat major. It is significant, however, that the tonal complex exploited both in the monologue and in the subsequent orchestral epilogue consists of E flat major (the synthesis), C major (the hero, Siegfried, thanks to whom the synthesis was possible) and D flat major (the new world). Thus the finale 'reveals', as it were, the principal keys of the work.

However, *The Ring of the Nibelung* features not only the tonal 'contrasting' of the elements and their synthesis. The transformations through which this synthesis is possible also occur on the tonal level. The mediation between man and God is possible, as it were, in two distinct ways. Firstly through the circle of flat keys, in which the main intermediate point is the key of E flat major, symbolising knowledge of the four elements (*mercurio*), and the symbolic seed of destruction is the death of the hero, as illustrated by the scheme:

C major - E flat major - D flat major
|
C minor

Secondly, through the circle of sharp keys, the sequence/path of which symbolises the path to knowledge, including the feminine element (Brünnhilde), of crucial importance here in the life of the hero. This sequence is opposed by the Nibelung, through their key of destruction, B minor (the main key of Hagen), as illustrated by the scheme:

C major - D major - E major - C sharp major = D flat major
|
B minor

D major is the principal key of Brünnhilde, and so the B minor of Hagen, preparing the drink of forgetfulness for Siegfried, is turned back de facto against her. One may conclude, therefore, that the negation of the Nibelung (expressed, for example, by the motif of destruction – *Vernichtungmotiv*) is twofold: they negate both positive existence (D flat major - B flat minor) and also the positive values in man (D major - B minor), thus acting on two levels – the metaphysical and the physical. So the circle of keys that is defined by the principal major keys (C - D - E - C sharp/D flat - E flat - C) and minor keys (c - b/c flat - b flat) is a cabalistic circle: man's path towards God and God's towards man.

The omnipotent Wotan, who in *The Rhinegold* 'wields' the key of mediation and the absolute, D flat major, 'falls' towards man in E major (the motif of Valhalla in the finale of *The Valkyrie*) and as the Wanderer approaches the human sphere in D major - C major (Siegfried). Brünnhilde, from the initial D major, through the fiery E major (the fire in the finale of *The Valkyrie*, the 'fire' in Siegfried's heart in the final duet of the third part of the tetralogy), arrives at the final D flat major in the closing monologue of *Twilight of the Gods*. Siegfried also attains awareness through the ultimate C sharp major/D flat major in the closing monologue and the funeral march in his honour, reaching it through cognizance (the woodland bird in *Siegfried* – E major), and also awareness of the harmony of the cosmos (the equilibrium of three elements – E flat major). Thus, by dint of its twofold nature, his path would be virtually 'exemplary', if it did not end in defeat – C minor.

To sum up, *The Ring of the Nibelung* is a remarkable interpretation of a tonal ethos, in which this system is integrated with the symbolic dimension of the work. However, the complexities and ambiguities in the domain of the symbolism itself, which account for the ambiguous and multi-layered mythical message of the work, make this tonal code difficult to decipher, with the result that any interpretation is open to possible accusations of ambiguity or inconsistency. Difficulties also arise from the considerable complexity of the harmonic language of the tetralogy, and of its final part in particular. The general rule would appear to be the symbolic signification of key, which leads to the main key being designated by the composer's writing out of a specific number of sharps or flats. Yet the changes that occur over larger tonal structures, linked, for example, to the characteristic tripartite structure of the poetic-musical period (see Lorenz, 1924), and also the frequent modulations, the departures from the main key, the manifold alterations and added components, mean that the work's harmonic language would be difficult to comprehend solely from the perspective of the semantics of key. The multiplicity of harmonic issues in *The Ring*, as well as their relatively exhaustive analysis, forced the author to leave aside structural issues connected with harmony and concentrate solely on the semantics of key, to the inevitable detriment of the cognitive status of this element of the tetralogy.

References

(Beckh, 1937) *Die Sprache der Tonart in der Musik von Bach bis Bruckner mit besonderen Berücksichtigung des Wagner'schen Musikdramas.* Stuttgart.
(Brandhofe, 1988) *Intervallstruktur und Personalstil bei R. Wagner.* Münster.
(Dahlhaus, 1987) *Musik als strukturale Analyse des Mythos C. Levi-Strauss und "Der Ring des Nibelungen"* in: *Wege des Mythos in der Moderne. R. Wagner "Der Ring des Nibelungen",* hrsg. Dieter Borchmeyer. München.
(Lorenz, 1924) *Das Geheimnis der Form bei R. Wagner. Der musikalische Aufbau des Bühnenfestspieles "Der Ring des Nibelungen".* Berlin.
(Scheler, 1954) *On the Tragic.* Tr. Bernard Stambler. Reprinted in: *Tragedy: Vision and Form.* Ed. R. W. Corrigan. San Francisco.
(Treiber, 1975) *Die Todesszene in den Bühnenwerken R. Wagners.* Schwetzingen.

Santrauka

R. Wagnerio „Nybelungo žiedas" kaip muzikinis ir draminis ciklas.
Tonacinės struktūros semantinė vienovė

R. Wagnerio „Nybelungo žiede" akivaizdus dramaturginės įtampos kilimas. Pirmoji ciklo dalis „Reino auksas" pateikia visą kūrinio makrokosmosą su jame viešpataujančiomis keturiomis stichijomis (oras, ugnis, žemė ir vanduo), kurias įkūnija keturios dievybės (Votanas, Loge'is, Erda, Reino dukterys). „Nybelungo žiedo" kosmologijoje išryškėja trys sluoksniai (dievų pasaulis, mirtingųjų pasaulis ir Nybelungų pasaulis), kurie ryškiai vaizduojami kitose tetralogijos dalyse. Herojinė drama („Valkirija"), optimistinė apologija („Zygfrydas") ir eschatologinė tragedija („Dievų sutemos") – tai trys pakopos, vedančios į enigmatišką baigtį: senojo pasaulio pabaigą galima laikyti naujojo pradžia.

„Nybelungo žiedo" mitinės struktūros spirališkumas išryškėja ne tik leitmotyvuose, bet ir visos milžiniškos kompozicijos tonacinėje struktūroje. Ciklo tonacijoms suteikiamos ir struktūrinės, ir semantinės reikšmės. Kai kurias cikle vaizduojamas semantines priešybes – gyvenimą ir mirtį, gėrį ir blogį (ir ontologine, ir epistemologine prasmėmis), dievus ir mirtinguosius – įkūnija dvejopa tonacinė viso veikalo struktūra. Pagrindinė – dievų ir žmonių – priešprieša išreikšta dviem tonacijomis – *Des-dur* ir *C-dur*. Šios dvi tonacijos taip pat turi savo priešpriešas, išreikštas minorinėmis tonacijomis, kurios simbolizuoja vertybių neigimą. Ketvirtoji priešprieša (tarp tonacijų *Es-dur* ir *es-moll)* gali būti vertinama kaip priešprieša tarp keturių stichijų pažinimo ir nuojautos apie dievų žlugimą.

Tonacijų, kurios Wagnerio cikle yra tarsi tonaciniai logotipai, naudojimas yra struktūriškai ir semantiškai susijęs su metafizine veikalo prasme. Taigi tonacijų parinkimas tampa svarbiu, visą šį didžiausią operos istorijoje ciklą vienijančiu faktoriumi.

Steven G. Young

Follower of Franck: The Cyclic Style in the Music of Louis Vierne

Louis Vierne, an often neglected composer in the early twentieth century, felt deeply the influence of César Franck, especially Franck's cyclic style. Although Vierne was accepted in the organ class of Franck less than a month prior to Franck's untimely demise in 1890, the younger man had enjoyed several encounters with the great master while studying at *l'Institution nationale des jeunes aveugles*. (Vierne only had about 7% of what we consider to be normal vision, because of congenital cataracts.) Franck had paid frequent visits to the school as an examiner for the jury exams, and stayed in close contact with one of his prize pupils, Adolphe Marty, professor of organ at *l'Institution*. Through Marty, Vierne had begun to develop his love of the organ, improvisation, composition, and, most allowed especially, of Franck's music. Because of Vierne's prowess as an organist, he was allowed to audit Francks's organ class at the Conservatoire for well over a year before his official enrollment. Vierne developed a deep affection and respect for the great French master, as evidenced by Vierne's claim that Franck's death "was like losing a father for the second time."[1]

In spite their relatively limited personal interactions, Franck's music left an indelible imprint on the young Vierne, as can be seen in Vierne's use of the cyclic style. From his earliest compositions, the consistent use of a recurring thematic idea, though frequently reharmonized, became part of Vierne's trademark style, a style strongly rooted in the French tradition. We see this idea in Vierne's particular attraction to two forms, the A-B-A form and the Sonata-allegro form, both of which usually involve a return to previously stated material.

Beginning with the *Quatour à cordes*, composed in 1894, Vierne's first attempt at chamber music, we see the seeds of the cyclic phenomenon. Example 1a gives the opening melodic idea in the cello, a simple turn figure which reappears, in one guise or another, in each of the four movements. While the turn figure may not stand out as a particularly substantial melodic idea, it clearly functions as a "cyclic motive" in the manner of Franck. The young composer, only in his early twenties, thus pays homage not only to the work's dedicatee, Charles-Marie Widor, Vierne's mentor and dear friend, but also to Franck.

Example 1a. *Quatour à cordes, Opus 12*, movement I, m. 1–2
manuscript BN Res. Ms. 1070
N.B. All examples from this work come from this manuscript

Within the four movements of the quartet, we find the recurring motive treated to augmentation, both intervallically and rhythmically, as well as inversion. It is hidden in inner voices and blatantly presented in the prominent melodic instrument. Example 1b shows the initial phrase of movement II; the motive in measure 2 uses the exact same pitches as in the opening figure from movement I, only with the turn figure in inversion.

Example 1b. *Quatour à cordes, Opus 12*
Movement II, m. 4–6

Later, the viola has the motive in augmentation. (Example 1c)

Example 1c. *Quatour à cordes, Opus 12*
Movement II, m. 37–40

Movement III obscures the melodic figure slightly as it comes at the end of the theme, rather than at the outset, and it has a more relaxed rhythm (Example 1d.1). A livelier, slightly altered version of the motive is found later in the movement as seen at the *poco agitato* in Example 1d.2. Finally, in the last movement, the turn figure is expanded in several ways, with a final recollection of the idea coming late in the movement appearing as part of the subject of the fugue that closes the work (Examples 1e.1 and 1e.2).

Example 1d.1. *Quatour à cordes, Opus 12*
Movement III, m. 5–7.

Example 1d.2. *Quatour à cordes, Opus 12*
Movement III, m. 34–37.

Example 1e.1. *Quatour à cordes, Opus 12*
Movement IV, m. 143–145.v

Example 1e.2. *Quatour à cordes, Opus 12*
Movement IV, m. 160–161.

Moreover, Vierne provides an additional moment in the last movement that recalls and transforms an earlier idea from the opening movement. Late in the movement, the viola has a melodic figure that uses an inversion of the descending diminished seventh that began the opening movement, now seen and heard as an ascending sixth (compare examples 2a.1 and 2a.2 with example 1a).

Example 2a.1. *Quatour à cordes, Opus 12*
Movement I, m. 9–13.

Example 2a.2. *Quatour à cordes, Opus 12*
Movement IV, m. 92–95.

The *Quatour à cordes* represents only the first step in the maturation process of a composer so devoted to this style that cyclicism completely saturates one of the late masterworks. Several years later, in 1902, Vierne completed his *Deuxième Symphonie pour orgue, Opus 20*. The symphonic structure is, in many ways, well-suited to Vierne and the cyclic principle. Most of Vierne's organ symphonies consist of five movements; fast-slow-fast-slow-fast, suggesting an overarching cyclic structure. The first and last movements of the symphonies tend to be in sonata-allegro form, reinforcing this sense of formal balance. So, it seems only natural that Vierne's first serious attempt at writing in a cyclic style using thematic (melodic) material should be evidenced in an organ symphony. One such example of the cyclic technique is found in the final measures of the opening theme of the symphony that is reincarnated and rhythmically transformed when it reappears in the *agitato* section of the second movement, as seen in examples 3a.1 and 3a.2.

Example3a.1. *Deuxième Symphonie, Opus 20.* J. Hamelle et Cie (1903)
Movement I, m. 5–7.
N.B. All examples from this work come from this edition.

Example 3a.2 *Deuxième Symphonie, Opus 20*
Movement II, m. 33–34.

Vierne's style has evolved and he now begins to use actual thematic material, not just motives as previously witnessed. In the *Deuxième Symphonie* we can observe the emergence of Vierne's truly personal imprint.

For example, this symphony makes use of adventurous, far-reaching tonal relationships, especially in the slower movements. In one instance, the composer moves within the tonal areas of Ab Major, B minor, E minor, and C Major. Vierne's distinctive voice often recalls the cyclic style of Franck, as in the first movement's development section. There the two main thematic ideas are combined, heard simultaneously in the outer voices within the C minor portion of this movement. (This combination of themes recurs in the Coda of this movement as well.)

Beginning with the second movement, Vierne reintroduces material from the opening *Allegro*. The second theme of the first movement, rhythmically altered, becomes the basis for the melody that opens movement II. With this rhythmic alteration comes a new agogic stress on the second beat of the theme, partially disguising the cyclic relationship (see Examples 3b and 3c).

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Example 3b. *Deuxième Symphonie, Opus 20*
Movement I, m. 39–42.

Example 3c. *Deuxième Symphonie, Opus 20*
Movement II, m. 1–4.

We do not hear material from the first movement again until the Final. Here, in this last movement, the second theme recalls the opening melody, now in a much smoother setting than that of the jagged opening (see Examples 3d.1 and 3d.2).

Example 3d.1. *Deuxième Symphonie, Opus 20*
Movement I, m. 1–4.

Example 3d.2. *Deuxième Symphonie, Opus 20*
Movement V, m. 88–89.

But Vierne does not appear to be satisfied enough to stop there – instead, he takes the second lyrical theme from the third movement *Scherzo* and transforms that melodic idea into the aggressive, more active theme that begins the final movement, as seen in Examples 3e.1 and 3e.2.

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Example 3e.1. *Deuxième Symphonie, Opus 20*
Movement III, m. 73–78.

Example 3e.2. *Deuxième Symphonie, Opus 20*
Movement V, m. 9–10 (cyclic transformation)

Again, the rhythm and the musical stresses have been altered and the tonality has been changed, but the theme can be clearly heard upon careful listening. In contrast to the recurrence on a simple figural idea, as observed in the earlier quartet, this thematic manipulation and recall represent a truly cyclic style.

The seminal *Deuxième Symphonie* serves as a point of departure, which led the composer into more adventurous areas of cyclic transformation and development, culminating some twenty years later in the *Cinquième Symphonie, Opus 47*. An intermediate step in this development appears in the next major piece of chamber music, the *Sonate pour violoncelle et piano, Opus 27*.

This sonata, composed in 1911, was written at a time when Vierne's life was not at its happiest. He had been recently divorced from the singer Arlette Taskin, and forbidden by the Catholic Church to remarry. Vierne was a very devout believer. In addition, he lost his youngest son to tuberculosis, while his mother and his best friend, Alexandre Guilmant, died within one month of each other from uremia. He was refused a second time for the position of *professeur d'orgue* at the *Conservatoire Nationale de Musique*, and his friendship with Gabriel Fauré, then director of the Conservatoire, faltered for a lengthy period.

In the cello sonata, the use of cyclicism appears not in several movements as it did in the *Deuxième Symphonie*, but only in the last movement. There, Vierne recalls themes from both of the previous movements in a type of retrospective that calls to mind the fourth movement of Beethoven's Fifth Symphony where the Scherzo material is repeated as well as the final movement of his Ninth Symphony where all previous themes are recalled. Significantly, Franck has been considered by some, according to his biographer Vincent d'Indy, to be the French heir and propagator of Beethoven's style. That being said, it may follow that Vierne, successor to and spiritual son of Franck, would wish to emulate Beethoven as well. Vierne expands this recollection technique beyond the manner employed by Beethoven. Vierne brings the allegro movement to a virtual halt prior to the recapitulation, calling for a tempo of *Doppio più lento*, and then the piano offers themes from the previous movements simultaneously: the right hand has the first subject from the second movement, while the left hand concurrently plays the first theme from the first movement (see Example 4a).

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Example 4a. *Sonate pour violoncello et piano, Opus 27*
Durand et Fils, Paris (1911)
Movement III, m. 169–172.
N.B. All examples from this work come from this edition

Following this brief retrospective, the recapitulation proceeds, but then, once more, the music slows down to recall again the themes from the earlier movements, this time with the cello participating in the thematic remembrance (see Example 4b). This second nostalgic return is briefer than the first, as the work quickly resumes the *allegro* tempo and closes in a dramatic style, with the third-movement themes being tossed between the instrumentalists in a fiery dash to the finish.

Example 4b. *Sonate pour violoncello et piano, Opus 27*
Movement IV, m. 249–253.

The year 1917 was yet another tragic time in Vierne's life, as he lost his only remaining brother and his eldest son in the battles of World War I. As a response to his grief, Vierne composed his *Quintette pour piano et cordes, Opus 42*. Vierne wrote of this piece:

> "I am composing as a votive offering a quintet of vast proportions which will express the depth of my tenderness as well as the tragic fate of my child. I shall create something powerful, grand, and strong which will touch the deepest chords in the hearts of fathers who grieve for dead sons...As for mine, the last of my name, I shall bury him with a roar of thunder and not with the plaintive bleating of a resigned, stupid sheep."

The quintet opens with a dramatic and unsettling theme in the piano which moves to the strings. One might infer the great depth of Vierne's grief through his extreme use of dissonance as he uses 9 of the 12 available chromatic pitches before repeating any notes (see Example 5a).

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Example 5a. *Quintette pour piano et cordes, Opus 42.* Editions Salabert (1924)
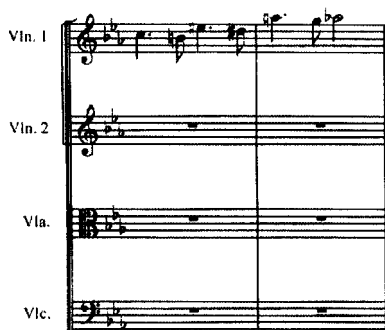Movement I, m. 1–4.
N.B. All examples from this work come from this edition
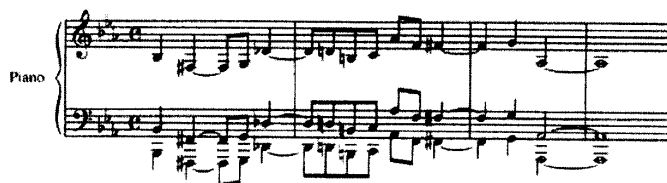
The movement goes on to include several themes, which will recur throughout the piece. The string theme that makes prominent use of descending minor seconds becomes elongated in the second section (*più mosso*) of the second movement (see Examples 5b.1 and 5b.2).

Example 5b.1. *Quintette pour piano et cordes, Opus 42*
Movement 1, m. 5–6.

Example 5b.2. *Quintette pour piano et cordes, Opus 42*
Movement II, m. 47–50.

Despite the lengthening, the descending minor seconds are still prominent – made even moreso by the agogic accent placed on the note that precedes the descent. Here we see a transformation of a theme through the addition of extra notes, whose intervals have also been an important part of the opening movement. (Included among these intervals are the tritone and the minor sixth.) The final movement of the work, in sonata-allegro form, recalls themes from the previous two movements but not in small sections, as witnessed previously in the cello sonata. Here the themes are lengthy and oft-repeated, interspersed with new material. Additionally, characteristic intervals that permeate the initial themes recur and are given places of importance, especially the ascending minor second. These recollections demonstrate a progression in Vierne's style. He now recreates and integrates entire themes rather than motives or fragments, clearly committed to the cyclic technique and synthesizing several significant influences.

If the *Quatour à cordes* represents Vierne's early attempt at composition using the cyclic technique, the *Cinquième Symphonie pour orgue*, Opus 47, stands as his crowning achievement, his apotheosis of the cyclic principle. This work, written in 1923, demonstrates nothing short of complete mastery of a distinctive style as well as the skill of a composer working at the height of his power. Every movement displays the cyclic principle, and Vierne does not limit himself to suggestions, hints, or fragments of thematic material; instead entire themes from the opening slow movement appear later in masterful reincarnations.

The two melodic ideas that begin the *Cinquième Symphonie* appear in every movement of this symphony in one form or another. Example 6a.1 gives both these ideas: the first, an arpeggiated figure in the pedals that outlines a major seventh sonority and the second, a more plaintive melody in the manuals that begins with a rising semitone and further reaches upward with a leap of a minor seventh, seemingly yearning for an octave.

Example 6a.1. *Cinquième Symphonie, Opus 47.* Editions Durand et Cie, Paris (1927)
Movement 1, m. 1–9.
N.B. All examples from this work come from this edition

The second movement, *allegro molto marcato*, commences with the initial descending arpeggio in the manuals revitalized in a rhythmically aggressive inversion (see Example 6b). The second theme appears in the bass, in a sort of invertible counterpoint achieved through the register exchange of these two themes. The second theme now extends to the octave that it originally failed to reach in the first movement, and will expand further as the movement progresses. (This was in fact foreshadowed in movement I, m. 72.)

Example 6b. *Cinquième Symphonie, Opus 47*
Movement II, m. 1–4.

The *Scherzo* utilizes the second theme for its melody, now in a playful compound duple meter, with an entirely staccato touch that adds lightness to its character (see Example 6c.1).

Example 6c.1. *Cinquième Symphonie, Opus 47*
Movement III, m. 1–3.

Once again, Vierne employs one of Franck's favorite techniques, that of combining themes. As the A section of the movement returns, the pedal has the descending arpeggio (theme I) in an even rhythm, supporting the rapid fire movement of the second theme, as seen in Example 6c.2.

Example 6c.2. *Cinquième Symphonie, Opus 47*
Movement III, m. 51–54.

Disguising the thematic material adds another dimension to the cyclic technique, as seen in example 6d. Vierne completely transforms the descending slow arpeggiated figure from the first movement into this intriguing melody found in the fourth movement *Larghetto* of the *Symphonie*.

Example 6d. *Cinquième Symphonie, Opus 47*
Movement IV, m. 29.
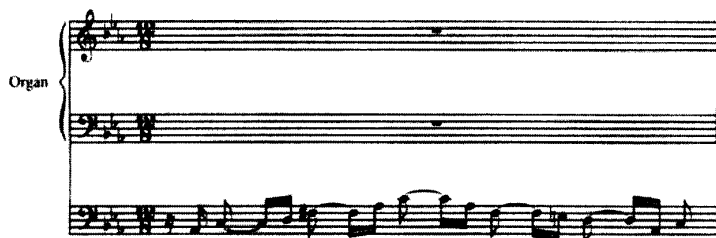
Vierne opens this fourth movement with an inversion of the original second theme, with the characteristic rising seventh now descending. As the movement continues, the original first theme (the arpeggio) returns, also in inversion, with yet another new syncopated rhythmic configuration and using some unusual intervals (whole steps and diminished thirds). The movement closes with another distinguishing feature – Vierne's intense chromaticism. In the last statement of the inverted second theme, Vierne harmonizes the melody with a series of rising chromatic thirds, creating exquisite tension before the final resolution.

The glorious *Final* opens with the original first theme in an iambic dance rhythm that swings like the peal of bells under a carillon-like accompaniment (see Example 6e). Vierne reintroduces the original second theme, still in inversion, at the tempo change. The work concludes with the initial theme alternating between the hands and feet, all accompanied by the carillon-like figure that opened the movement. Vierne harmonizes the tune with rich, colorful chords that resonate with dissonance and consonance, tension and relief, triumphantly demonstrating his total command of an inherited compositional technique that he has made entirely his own.

Example 6e. *Cinquième Symphonie, Opus 47*
Movement V, m. 1–9.

Notes

[1] Louis Vierne, *Mes Souvenirs, Cahiers et mémoires de l'orgue* (numéros spéciaux de la revue l'orgue), CXXXIV (1970).

Santrauka

C. Francko pasekėjas: Notre-Dame katedros vargonininko
Louiso Vierne'o ciklinis stilius

Beveik aklas Notre-Dame katedros vargonininkas L. Vierne'as tyrinėtojų yra laikomas jo mylimo mokytojo, vieno žymiausių ciklinio stiliaus pradininkų C. Francko „dvasios sūnumi". Nors L. Vierne'as pas Francką mokėsi gana trumpai, bet daug ką perėmė iš jo muzikinės kalbos. Gausiame L. Vierne'o kūrybiniame palikime galima rasti nemažai pavyzdžių, kuriems būdinga Francko chromatinė muzikinė kalba ir cikliškumas.

Šiame pranešime tyrinėjama Vierne'o ciklinės technikos plėtra Paryžiaus XIX a. pabaigos muzi-kos kontekste, ypač atkreipiamas dėmesys į jo muzikoje vis labiau įsigalintį chromatiškumą. Taip pat įvertinamas L. Vierne'o indėlis į prancūzų muzikos stilių raidą, aptariamas jam būdingas spalvinių harmonijų ir ostinatinių ritmų naudojimas. Nagrinėjamos dvi iš šešių kompozitoriaus simfonijų vargo-nams: *Deuxième* (0) ir *Cinquème* (V) bei trys kameriniai kūriniai: *Quartet á cordes* (Styginių kvartetas), *Sonate pour violoncelle et piano* (Sonata violončelei ir fortepijonui) ir *Quintette pour piano et cordes* (Fortepijoninis kvintetas). Ši analizė įrodo, kad L. Vierne'as puikiai suprato ir įvaldė C. Francko stilių, kartu išreiškė individualų savo braižą.

Kalliopi Stiga

The "Song" as the Origin of the "Cyclic Phenomenon" in the Work of Mikis Theodorakis

At the beginning of the 1960's while Greece is still counting its victims of the Hitler monstrosities and suffering open wounds because of the slaughter it experienced in the civil war, Mikis Theodorakis pounds out:

"Unite stone and stone
unite hand in hand.
The mountains and the ravines begin the song.
Cities and harbors join in the dance:
Today we marry the sun
the sun to the bride, the dearest, the Joy!"[1]

It is for Mikis Theodorakis the era of the composition of his one and only "modern pop[2] musical tragedy" with the title "*To Tragoudi tou Nekrou Adelfou*" (= "*The Ballad of the Dead Brother*").

It does suffice only to read these words: "*Unite stone and stone / unite hand in hand*", and the meaning of cycle becomes at once comprehensible. A meaning which is reinforced in the very same process of melo-poetry, because the melodic theme which is associated with these lyrics, that is the melodic theme of the last art song "*Unite! Rejoice*" of "*The Ballad of the Dead Brother*", is also the melodic theme of the orchestral introduction of the work. The meaning of cycle is therefore absolutely clear!

This is not a chance phenomenon. Mikis Theodorakis, the composer is greatly concerned not only with the "*cyclic form*" but also the "*music form*":

"*I have always enjoyed the notion of form (...) I believe that the song is independent, at the same time I want the listener to be initiated into meaning of the form and further... The cycle of songs is another form more advanced.*"[3]

The "*cycle of songs*", the "*pop oratorio*", the "*modern pop musical tragedy*", the "*flow-song*", are the music forms which compose one of the basic tools of Mikis Theodorakis for the creation to "*music for the masses*". However what exactly is meant with the term and why does he want to create "*music for the masses*"?

Born in the village of on the border island of Hios, in the East Aegean Sea, in 1925, during a period of great political instability due to the proclamation of Democracy one year earlier, the Greek composer, philosopher, innovator and politician Mikis Theodorakis grows up during the period between wars. During the World War II he was influenced immensely by the climate of the times. And so it was to him a natural course of events when at the very tender age of he became actively involved in war defending his country which was under attack from the Italians and Germans. When World War II was declared over, he continued to fight in the Greek Civil War that followed becoming totally absorbed in the ideologies of Marx and Lenin which as a resulted to his total dedication to the concept of freedom.

Having graduated from the National Conservatory of Music in Paris with Olivier Messiaen (musical analysis) and Eugène Bigot (conduction of orchestra), and lived for many years moving the circle of artists in Western Europe, Mikis Theodorakis realises that he is not at all interested in "*creating for an elite*". Quite the opposite, his deepest desire is to create a music that is unrestricted of all classification and categorization, a music that is directed at both the people and the elite, at the individual as well as the crowd, a: "*music without borders*".

Convinced that "*one of the elements of freedom for the people is learning*"[4], influenced by the ideals of Solomos and Hegel, and inspired by "*the socialistic political rebellion*" which according to Lenin "*... transforms the culture, distanced from the people, during conditions of capitalism back into his domain giving the working class the possibility of the essential use of the properties of his culture, civilization and democracy*[5]", Mikis Theodorakis wanted, as he expressed during an interview I took from him on January 9th 2001, "*to offer great art to the people so he might*

converse with great works of art such as those which only aristocracy had the opportunity to do"[6].
He believes that in this way he will be able to contribute to the education and as a result the
"*liberation of the masses*", and in this instance, the "*liberation of the Greek people*".

For Mikis Theodorakis:

> "*Art is Freedom. And for this reason it speaks directly to the free. The artist who holds a
> conscience of the nature of his work and wishes his work to have well developed receivers,
> should contribute to ensuring freedom, to be free, as only in this way his efforts full filled.*"[7]

It was so that, during the sixties while Greece entered a new period of political instability,
change and class upheaval and the Greek people were suffering under the extremes of nationalism
of the ruling social class as well as the increasing anti-communism feelings, Theodorakis was
assigned head of the "*politico-cultural renaissance movement*" and he creates "*a music for the
masses*". "*Music for the masses*" is born out of "*the marriage of modern Greek pop music and
modern Greek poetry*." Out of this union is created in turn, new musical forms that refer to
previous ones.

These forms characterize the "*movement of the art song*"[8] whish was inaugurated by Mikis
Theodorakis in Paris in 1958, with the process of melo-poetry of "*Epitaph*" of Yannis Ritsos. The sole
aim of the movement was the conjunction of "*savante music*" – appreciated by the elite- and "*pop
music*" – appreciated by the people. As a result Mikis Theodorakis hoped to achieve a conjunction of
the elite and of the people as well as the elimination of the "*social class system*" from the world of
music culture to which everyone would have access regard less of social or educational status.

Mikis Theodorakis, well-aware of his educational role, realised he owed it to the people to
maintain the movement to progressively initiate the people to the meaning of musical form
beginning with the "*song*" heading to more complex forms.

Mikis Theodorakis considered the "*art song*" as a "*simple form of music*", as "*a melody as we
say a musical phrase tied to a text*"[9]. During my interview with him on June 9th 2001, he character-
istically said:

> "*In art-song poetry and music co-exist. My efforts have focused on the exposure of the
> music that is embedded in the lyrical poetic work. To the extent where the new achieve-
> ment, the art-song which arose from the co-existence, could be characterized — due to its
> function — as pop, then our effort diverse for the framework of an atomic success and it is
> impressed upon the collective memory uncountable consequences for the psyche dynamic
> of the national conscience*".[10]

Mikis Theodorakis believes that "*the art song*" is "*the bread of life because it speaks straight
to the heart and the sentiment and less to the mind*"[11]. He describes the "*art song*" as "*the red dot
which redeems the tyranny of grey bearable*"[12]. For Mikis Theodorakis the "*art song*" is a "*type of
modern tragedy. The* "*art song*" *is a race in its essence, in its path and in its historical continuity*"[13].

This definition is justified in the etymology of the word "*tragoudi*" (=song). The "*tragoudi*"
derives from the word "*tragodia*" (= tragedy) which in turn is derived from the word "*tragodos*" =
"*tragos + aoidos*" (= goat + singer). The tragedy is therefore the "*epi trago odi*" which refers to
the dance round the goat sacrificed to the gods or to those who dance in exchange to the goat.
The first explanation remains the most logical.

The slightly more advanced form, in comparison to the "*art song*", is the "*cycle of songs*".
Undoubtedly Theodorakis believes that "*the «cycle of songs» does not constitute a particular form
of music. It strictly adheres to a poetical text which however is defined by a joint central idea. And
therefore analogous with the depth of component of the poetic text, repetition and meaning of the
development is defined.*"[14]

Mikis Theodorakis defines three different categories of "*cycle of songs*" relevant to the
degree of link between the text and the music.

Further between 1960 and 1968, the composer inspires three new advanced musical forms:
"*the pop oratorio*", "*the modern pop musical tragedy*" and "*the flow song*".

The popular oratorio is born in 1960 with the melo-poetic process of the "*Axion Esti*" of the
Nobel Prize winner the Greek poet Odysseus Elytis. It could be said that this new form which is
renamed by Mikis Theodorakis into "*meta-symphonic music*", is imposed by the very form of the
poetic work.

According to the composer, *"the difference between the meta-symphonic and the symphonic music appears in the existence of the following elements in meta-symphonic music: 1) popular song, 2) folk instruments and popular singers, 3) symphonic instruments, 4) chorus, 5) the "savant" poetic text. Contrary to the symphonic work which ceases to employ folk instruments and popular singers supporting however the poetic text. So it is that the symphonic work continues to look upon it as a modern oratorio based on the poetic words and human voices."*[15]

The *"modern pop musical tragedy"* is inaugurated by Mikis Theodorakis between 1960 and 1963, during which time he wrote the musical and poetical material of *"The Ballad of the Dead Brother"*. According to the composer, this type has its roots in the ancient Greek tragedy which though time gave birth to the Italian "opera" as well as the French "lyrical tragedy". Also as described by Mikis Theodorakis, it has a place in world political theatre which was inaugurated by Berthold Brecht *"and as a result shares many common elements which are basically modern mythology – which is supported by recent historical events, such as the Greek civil war in this instance – and the modern pop song"*. It is complete scene with dialogue, dance and pantomime which bring grace to *"art songs"* and music. Mikis Theodorakis considers *"the «modern pop musical tragedy» as a continual compact musical-dance expression."*[16]

It is his whish for this type of music to be understood by the people and not to be directed only at the elite. At the same time, he wishes for it to maintain its modern character. The subject matter therefore should concern modern man and be sourced from modern history which *"has its own legends and heroes"*.

Regarding the *"flow song"*, it is an original form which has its roots in the lament songs of ancient Greek tragedy, named *"kommoi"*. It would appear that they have traversed the centuries in the form of long Gregorian songs as well as the Byzantine hymns or in the form of the *"infinite melody"* of Wagner; discarding every traditional element and embracing completely the prosody of the text[17].

According to Mikis Theodorakis, *"in the «flow song» which is a type of an infinite melody*[18], *the melodic line is not recycled but is repeated recreating the atmosphere of the poem."*[19] *"This form is far removed from every type of popular music. The esoteric development of the Modern Greek melody depends upon the exploitation and extension of its basic elements. The melody follows great poetic texts with free style. The «flow song» is longer in duration in comparison to the popular song which lasts for 3 to 4 minutes*[20] *and can go on for as long as 20 to 40 minutes as was the case in the Byzantine Hymn."*[21]

That witch is particularly interesting in the whole work of Mikis Theodorakis is the greater cycles which appears most often (for example, the great cycle of *"Arcadies"* as well as that of *"Politeies"*) and comprise works of the same or different musical forms. In point, the greater cycle of *"Politeies"* comprises four "cycles of song": *"Politeia A'"*, *"Politeia B'"*, *"Politeia C'"* and *"Politeia D'"*, while the greater cycle of *"Arcadies"* comprises six "cycles of song": *"Arcadie I"*, *"Arcadie II"*, *"Arcadie III"*, *"Arcadie IV"*, *"Arcadie VIII"*, *"Arcadie X"*, the meta-symphonic work *"Arcadie V"* and three "flow songs": *"Arcadie VI"*, *"Arcadie VII"* and *"Arcadie IX"*.

At the same time close connections are revealed not only between songs of the same cycle but also between songs of different cycles as well as works of different musical forms.

A musical-poetical analysis of several works reveals:

A) that the **existence of a cycle** is created through:

1) common poetical forms of the songs of the same cycle:

• for example, the poems of three verses dominate as follows: 68,75% in *"Politeia A' and B'"* and 55% in *"Politeia C' and D'"*;

2) in the rhythms and rhythmic cells which appear in more than one song of the cycle:

• the rhythm of *zeibekikon* which appears in many songs of the modern pop musical tragedy *"The Ballad of the Dead Brother"* [i.e. the songs of *"The Dream"* (= "To Oneiro"), *"The afternoon"* (= "Deilino"), *"Pavlos and Nicolios"*, *"At the gardens"* (= "Sta pervolia"), *"Unite! Rejoice"* (= "Enotheite! Doxastiko")] turns them into essential elements of an *"internal cycle"*;

3) within the same melodic theme or motif where more than one song appears in the same cycle:

• within the "cycle of songs" *"The Six Eluard"*, the first song entitled *"«Elle va s'éveiller d'un rêve noir et bleu»"*, the third song entitled: *«Sous des poutres usées»*, and the sixth song entitled:

«J'ai le pouvoir d'exister sans destin», *«a cycle into the cycle»* is created. In studying the three poems we can see that they refer to three different spiritual states of a person- in this case of the poet-: in the beginning, he is determined to face life with courage, thereafter an unending pessimism dominates him and finally he attempts to recover his inspiration. Mikis Theodorakis preferred to highlight the cyclic evolution of feelings: courage – pessimism – new optimism, maintaining the same melody in all three songs;

• Version B′ of the second melodic *theme B* of the song "*Lucid Suffering*" (= "Xasteros Ponos") of the "*cycle of songs*" "*More Lyrics*" (= "Lyrikotera") appears in the third melodic theme C of the song "*The sob of Angels*" (= "Lygmos Angelon") and in part in the third melodic theme C of the song "*Nostalgia*" (= "Nostalgia") of the same "*cycle of songs*".

B) that the **union of different cycles of songs** is realized through:

1) common poetical themes:

• for example, in "*Politeia A′ and B′*", the themes which dominate are ones of poverty, sadness and unhappiness due to exile and to emigration, and they direct us to themes of *rebetic songs*. On the other hand, "*Politeia C′ and D′*" refer to social injustice, to desperation, to loneliness, to the withering that a lost love brings. Despite this, both "*Politeia A′ and B′*" as well as "*Politeia C′ and D′*" hope and a tint of optimism shine through.

2) the rhythm and rhythmic cells which appears in different "*cycles of songs*":

• for example, within the musical analysis of the cycles of songs "*Politeia C′ and D′*", the frequent use of the 6/8 rhythm as well as 2/4 or 3/4 can be discerned. The rhythmic scheme of the triplets ♫♫ and of the doted notes ♪♫.♫ which appears in both cycles, make up the composite chain; the rhythm which dominates however is *chassapikon*.

3) common musical forms:

• for example, in the four cycles of "*Politeies*", the form which dominate is the strophic with refrain. Is is based on many short themes which are matched with each lyric (a theme/a lyric). The repetition of the themes and of the refrain, project the poetical text and communicate intensely the emotions expressed.

C) that the **union of works of different musical forms** is realized through:

1) the use of the same poetic text:

• for example, a new reworking of the process of melo-poetry of the poetical text of the "flow song": "*Our Sister Athina*" allows Mikis Theodorakis to include it in the "*Symphony n. 7*" the named "*Of the Spring*";

2) common musical themes:

• for example, the first melodic theme of the third prelude for piano, composed in 1947, is also the first melodic theme A of the song "*Mes soeurs prennent dans leur toile*" of the "cycle of songs": "*The Six Eluard*", composed in 1958. This melodic theme reapers in another tone and rhythm transformed in the song "*Margarita—Margaro*" of the "cycle of songs": "*The Archipelago*" composed between 1957 and 1959.

• The final melodic motif of the second theme B of the song "*Mes soeurs prennent dans leur toile*" of the "cycle of songs": "*The Six Eluard*", composed in 1958, is also used in the song "*The blood of love*" (= "Tis agapis aimata") of the pop oratorio "*Axion Esti*" composed between 1960 and 1963.

The reappearance of poetic and musical themes which amongst other gives birth to the "*cyclic phenomenon*" in the work of Mikis Theodorakis redeems it unique. The pedagogical role of the great and varied work springs from this recognition. The composer himself supports that:

> "*To create «Politeies» is like creating symphonies. Every song that was written – for example, in prison – could be included in great forms. These forms give the simple listener great wealth; they educate him. This is why I want the simple Greek person to be able to recognize symphonies (n. 1, n. 3 etc.) as well as "Politeies"; they were produced out of a pedagogical feeling.*"[22]

Fortunately, due to this as well as to ever-lasting messages of Peace, Liberation and Democracy conveyed in the music of Mikis Theodorakis, it broke barriers, crossed borders, became ecumenical as well as a tool able to carry out a basic function *"the education of the people and their transformation into historical forces."*[23]

In order that future generations may gain from this double role of the music of Mikis Theodorakis we owe it to ourselves to study it, to protect it and to preserve it.

Moreover we should not forget that the choice of the *"cyclic form"* which transforms every work into a *"star"* of *"the musical galaxy"* of Mikis Theodorakis, is a conscious one. According to Mikis Theodorakis, *"the melody, the art song, the cycle of songs, the pop oratorii, the meta-symphonic works, the symphonies, the oratorii, the lyrical tragedies compose a joint Sound Musical Lyrical Philosophical Universe"*.[24] He declares besides: *"I want than my music will be one continuous history."*[25]

Is there better proof of this statement of the composer than to think of the melodic theme of the *"art song"*: *"Unite! Rejoice"* of *"The Ballad of a Dead Brother"* which reappears some 30 years later in *"Canto Olympico"*, composed in 1992?

"Canto Olympico" is a *suite* with seven parts for tenor-baritone-pianist-mixed chorus and symphony orchestra which relies on the melo-poetic process of Theodorakis' poetic text as well as the poetic text of Dimitra Manta. The piece was composed for the Olympic Games of Barcelona at the request of the President of the International Olympic Committee, Mr Juan Antonio Samaranch.

More specifically in this work the above mentioned melodic theme, appears: a) in the first part *"Ode to Zeus"* (= "Odi ston Dia") and b) at the end of the third part *"Ode to the first Olympian champion"* (= "Odi ston proto Olympioniki") in the first part entitled: *"Rejoice"* (= "Do-xastiko") as well as in the second part of *"Stones Unite!"* (= "Enotheite vrachia- vrachia") in the sixth part entitled: *"The resurrection of Olympic Games"* (= "I Anagennisi tis Olympiadas").

Wishing to explain this choice, Mikis Theodorakis writes:

> *"I thought that the content and the form of a work which is directed at sports fans around the world should be equal to simple performances as far as is possible to the song which constitute the basis of music education in modern societies."*[26]

And in this way *"the cycle"* which open in the 60's, closes in the 90's showing in the best possible way the exactness of the experienced and internationally renowned composer when faced with the propositions of an enthusiastic enlightened composer.

Notes

[1] "Unite! Rejoice!" in "The Ballad of the Dead Brother" of Mikis Theodorakis.

[2] Theodorakis Mikis, *Music and Theater*, Athènes, Ed. Eleftheriadis Group, 1983, 180 p.: According to the translator of the book, Georges Giannaris, the term "pop" for "laik" (*laikos, laiki, laiko*) is better suited since the English word does not convey all the connotations of the Greek term either sociologically or musically.

[3] Interview given by Mikis Theodorakis to Kalliopi Stiga, Athens, 9-6-2001.

[4] Interview given by Mikis Theodorakis to Kalliopi Stiga, Athens, 9-6-2001.

[5] Great Russian Encyclopaedia, vol. 28, *"the socialistic political rebellion"*, p. 244.

[6] Interview given by Mikis Theodorakis to Kalliopi Stiga, Athens, 9-6-2001.

[7] Theodorakis Mikis, *Where can I find my soul? / Art and Civilization*, Athens, Ed. Livanis, 2002, p. 227.

[8] I use the term "art song" to express the Greek term "endechno laiko tragoudi".

[9] Theodorakis Mikis, *Anatomy of Music*, Athens, Ed. Sychroni Epochi, 1983, p. 55.

[10] Interview given by Mikis Theodorakis to Kalliopi Stiga, Athens, 9-6-2001.

[11] Interview given by Mikis Theodorakis to Kalliopi Stiga, Athens, 9-6-2001.

[12] Theodorakis Mikis, *Where can I find my soul? / Art and Civilization*, Athens, Ed. Livanis, 2002, p. 200.

[13] Theodorakis Mikis, *About the Art*, Athens, Ed. Papazissi, 1976, p. 11.

[14] Theodorakis Mikis, *Music for the Masses*, Athens, Ed. Olkos, 1972, p. 23–24.

[15] Theodorakis Mikis, *Anatomy of Music*, Athens, Ed. Sychroni Epohi, 1983, p. 36.

[16] Theodorakis Mikis, *Poetry setting in music*, Athens, Ed. Ypsilon, 1997, vol. I, p. 88.

[17] Beltrando-Patier Marie-Claire (dir.), *History of Music*, Paris, Ed. In Extenso, 1998, p. 771.

[18] Wagner Guy, *Mikis Theodorakis: A life for Greece*, Paris, Ed. PHI, 2000, p. 171.

[19] Flessas Iannis, *Mikis Theodorakis*, Athens, Ed. Aigokeros, 1994.

[20] Theodorakis Mikis, *Music for the masses*, Athens, Ed. Olkos, 1972, p. 107–108.

[21] Theodorakis Mikis, *Poetry setting in music*, Athens, Ed. Ypsilon, 1988, vol. 3, p. 127.

[22] Interview given by Mikis Theodorakis to Kalliopi Stiga, Athens, 9-6-2001.

[23] Interview given by Mikis Theodorakis to Kalliopi Stiga, Athens, 9-6-2001.
[24] Theodorakis Mikis, *Poetry setting in music*, Athènes, Ed. Ypsilon, 1988, vol. 3, p. 167.
[25] Folkerts Gerhard, *The symphonies of Mikis Theodorakis*, in Proceedings of International Congress: *«Mikis Theodorakis: the man, the creator, the musician, the politician, the man from Creta, the Ecumenical...»*, Hania, Ed. Department of Hania with the help of the Minister of Culture, December 2005, p. 109–110.
[26] Introduction of Mikis Theodorakis to the cd «Canto Olympico», Athens, 1996, LYRA CD 0193.

Santrauka

Daina kaip ciklo fenomeno ištakos Mikio Theodorakio kūryboje

Graikų kompozitorius, mąstytojas ir politikas M. Theodorakis nuo pat jaunystės buvo ištikimas laisvės idealams. Būdamas įsitikinęs, kad „visuomenės švietimas yra vienas iš faktorių, padedančių jai laisvėti", ir įkvėptas „kultūrinės ir socialinės revoliucijos", jis siekė „meną dovanoti liaudžiai". Todėl XX a. septintąjį dešimtmetį jis buvo Graikijos politinio ir kultūrinio atgimimo judėjimo priešakyje ir kūrė muziką „liaudies masėms". Pasak kompozitoriaus, „muzika liaudies masėms" gimė iš graikų tradicinės ir populiariosios muzikos bei neohelenistinės poezijos sąjungos. Šis susiliejimas sąlygojo ir naujų muzikos formų, tokių kaip dainų ciklas, liaudiška oratorija, šiuolaikinė muzikinė tragedija, ištisinės plėtotės daina, atsiradimą. Tačiau visuomenės supažindinimas su šiomis naujomis, sudėtingesnėmis, muzikos formomis turėjo vykti palaipsniui, todėl Theodorakis pradėjo nuo paprastesnių formų, t. y. dainos.

Šio pranešimo tikslas – atskleisti sąsajas tarp ciklo dainų, tarp įvairių dainų ciklų ir net tarp skirtingos formos kūrinių, kadangi, kaip sakė pats kompozitorius, „norėčiau, kad mano muzika būtų viena begalinė istorija". Kita vertus, pranešimas atskleidžia švietėjišką jo ciklo fenomeno vaidmenį ir tarptautinei auditorijai siūlo būdus, kaip išsaugoti ir puoselėti jo kūrybą, galinčią tapti esmine priemone, „šviečiant visuomenę ir paverčiant ją istorine varomąja jėga".

Rimantas Janeliauskas

M. K. Čiurlionis' Unrecognized Cycle
(St. Petersburg, February 1909)

A highly original and unique thinking, the manner of composing and the shape of writing down musical works of Mikalojus Konstantinas Čiurlionis, the great Lithuanian artist and composer, has made hard to properly perceive and appreciate the depths of his creative heritage until the present days. Exceptionally dramatic seems to be the heritage of the composer's piano works. It has been supposed until now that Čiurlionis spontaneously wrote dozens of small-scale self-contained (single) pieces of music, making no attempts to call them cycles. The same is, however, not true of his works of art and paintings. Among them rank several dozens of cycles.

The aim of this study is to draw attention to one of the composer's unrecognized piano cycles. It is based on Čiurlionis' four piano works written in St. Petersburg, February 1909 (VL 330–333).

The analysis of the unrecognized cycles has been carried out in stages, applying new special methods every time. At first, on the basis of the composer's autographs and known chronologies of his works, an attempt was made to establish the probability of the supposed cycles (Prognosis of the Cycles). Later, the study was concentrated on various inner structural aspects of the cycle (Structurality and Intentionality of the Cycle). At the end of the study, the structure of the cycle was juxtaposed to universally known models of cyclic form and the identity of the cycle established (Identification of the Cycle).

Musicologists point out a cyclic thinking characteristic of the composer (V. Landsbergis, D. Kučinskas)[1]. The composer's cyclic intuition seems to have served for editors as an incentive to combine and group the composer's various works to form opuses and cycles (JČKF, VLKF). Of interest is the fact that the works of the supposed cycle (Examples 1–4) are included in the groups of various works with different titles (Scheme No 1):
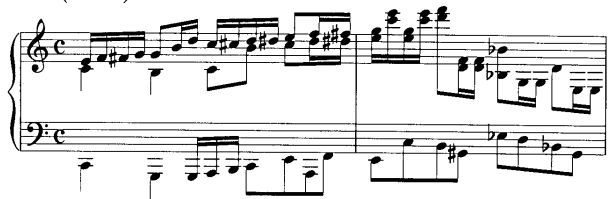
Scheme No 1

VL	288	287	289	290
JČKF:				
'Two pieces':				
Op. 32		Nr. 1		
VLKF:				
'Sea Preludes':	XII	XIII		XIV

Examples 1–4

Ex. 1 (VL 331)

Ex. 3 (VL 332)

Ex. 2 (VL 330)

Ex. 4 (VL 333)

One of such works can be seen (VL 330) in the opus "Two Pieces" compiled by J. Čiurlionytė (Op. 32). This opus embraces two works (No 1 and 2) of contrasting tempos (*Allegro* and *Andante*) and keys (C and A). The musicologist, however, when forming the opus pays little attention to the dates indicated by the composer (author: St. Petersburg, 16 ♓ 1909 and Druskieniki, 20 ♓ 19) and the manuscript pages (Čm 58, p. 1–3 and Čm 57, p. 1–3). Whereas both pieces of the opus were composed in different places, different months and written down in different manuscript books. It follows that the inclusion of these works in an integral opus looks artificial.

The three works – the objects of our interest – have been included in the cycle "Sea Preludes" compiled by V. Landsbergis. The musicologist, alike J. Čiurlionytė, arranges works only slightly observing even the chronology of the composer's works listed by him (Scheme No 2):

Scheme No 2

VL	318	319	320	328	250	232	324	325	326	327	329	331	330	333
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
	C	d	d	C	D-flat	d	c	d	b	C	b	C	C	b

On the other hand, it is evident that the key plan of the cycle rather regularly returns the central key (C, c). At first the preludes in this key are in fast tempo (I, IV, VIII), later – slow (X, XII), and the return of the fast tempo at the end (XIII) witnesses the musicologist's deliberate attempts to impart certain features of a structural cyclic character to the whole group of works. Nevertheless, the manipulation of the key plan and the tempos unmarked by the composer is most likely not an inner reason for a cyclic nature. A similar voluntarism of compiling works into cycles makes possible to think that the cycles at the discretion of the editors can be every time formed different, therefore, the composer's one and the same work can "travel" from one cycle to another (comp. VL 287 in the discussed "editors' cycles").

The integrity of the composer's thinking, on the one hand, and the voluntarism of the editors to group the composer's works at their own discretion – on the other, induces one to search for more internal, motivated criteria of the composer's cyclic works.

Prognosis of the Cycle

The first step enabling one to guess the existence of the cycle is a closer glance at the chronologies of the works (Scheme No 3):

Scheme No 3

KJŽ	724	769	766	596
VL	330	331	332	333
DK	287	288	289	290
Čm. 58:	p. 1–3	p. 4–5	p. 7–8	p. 10–11
Author:	16 ♓ 1909	17 ♓ 1909	19 ♓	25 ♓ 1909
	St. Petersburg	St. Petersburg	St. Petersburg	St. Petersburg, 1 Marza
Measures:	22	17	19	26
		(unfinished)	(unfinished)	

It is easy to notice that all the four works are successively arranged within the metrics of known chronologies (VL, DK, except KJŽ). The dates marked by the composer have been undoubtedly of service. With every new work they indicate later and later time (02 16, 02 17, 02 19, 02 25, etc.). Visually, the works are not so successively written down on the pages of the manuscript. The omitted blank pages can be naturally explained by a formal incompletion of the works (DK 288, 289).

The study of the dates of later and earlier written works is of paramount importance for the establishment of the probability of the cycle.

For the sake of evidence the following extract (Čm 58) from the manuscript is presented below (Scheme No 4):

Scheme No 4

1−3	−	Prelude in C, DK 287 (VL 330)
4−5	−	Prelude in C, DK 288 (VL 331)
6		
7−8	−	Prelude in Am (VL 332, unpublished, see Example 11)
9		
10−11	−	Prelude in Bm, DK 290 (VL 333)
12−13	−	Sėjau rūtą (I sowed a Rue), DK 291 (VL 334)
14−15	−	Prelude in G, DK 296 (unpublished)
16−17		
18−21	−	Prelude in G, DK 297 (VL 338)

We cannot help noticing at once that the successive pages reflect slightly later written works. The work in B minor (here called "Prelude", incidentally, similar titles are mere inventions of editors) is followed by variations for piano on the theme of the Lithuanian folk song "Sėjau rūtą" ("I sowed a Rue") marked by the composer. Later follows the Prelude in G major, which in the opinion of D. Kučinskas is "approximately dated on the basis of the means of writing and the place of the autograph"[2], because the Prelude is formally unfinished (contains mere 11 measures), and here one can find some blank pages in the manuscript (Čm 58, p. 16–17). The next work (VL 330) untitled by the composer bears a later enough date – 05 15 (author: 15 Ӿ 1909), therefore, it is impossible to associate this work with the supposed cycle. It follows that the positions of the manuscript seem to naturally bring out the works of the supposed cycle. They get separated due to the position of the autographs below the date of the titled work by the composer and much later dates of the works.

The works dated earlier (DK 285 and 283 or VL 327 and 329, Examples 7, 8) than the supposed cycle can be seen in another manuscript book (Čm 52, p. 32–33, author: 13 Ӿ 1909, Petersburg, p. 36–37, author: 10 Ӿ 09, Petersburg, and others). It is evident that the composer apparently wrote down both works where he found enough place, i. e. on blank pages, because the numeration of the pages and the dates of the autographs are asynchronious (a later date on earlier pages, etc.). This asynchrony partly bears witness, as we shall later see, to the beginning of the searches for the cycle.

The carried out analysis of chronologies and manuscripts enables one to guess the scope of the works forming the cycle. Thus, the cycle most likely includes four marked works. It is, however, not clear whether the placement of autographs coincides or not with the sequence of the movements of the supposed cycle. In order to clear up this collision, it is necessary to conduct a structural analysis of the works.

Structural Character of the Cycle

The key plan is conventionally considered to be a significant criterion of the sequence of the movements of the cycle. In the chronologies, as we have noticed, the four works (Examples 1–4) are marked by three different keys (C, C, Am and Bm). It seems, however, to be not quite exact. The second, according to the chronology, work strongly enough manifests itself in G major. It is true that this key begins with unstable harmonic functions – the subdominant and dominant and only after that reinforces itself in a stable function of the tonic key (I, m. 2). Incidentally, the work ends also in a similar way (m. 16 and 17). However, in the editors' opinion, the work is unfinished, therefore, its "end", leading to the final cadence in C major, is without restraint added in C major (see: VLKF, m. 18–21). In this way, the authentic trace of the cyclic form of the work is obliterated, whereas the unfinished character of the work is indeed supposed. This "incompleteness" in the key of G major makes possible to foresee a functional link with another work in C major. Further logically follow the keys of the rest movements – A minor as a parallel to the subdominant (C) and B minor as parallel of an opposite direction to the tonic (G). Therefore, the functions of the two latter movements of the cycle as if become inverted (Scheme No 5):

Scheme No 5

Movements of cycle:	I	II		III	IV
Keys:	G	C	|	Am	Bm
Functions:	T	S	|	S	T

Examples 5, 6
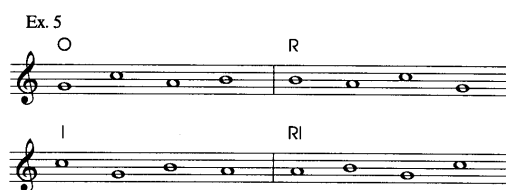
It is noteworthy that the final movements of the cycle, alike the first two, are interrelated in a "seemingly unfinished" way. Here movement III ends in the subdominant of the future movement in B minor and directly passes to the final movement.

Functional inversions can be noticed even now. The harmony of the "unfinished end" from G (I) and from Em (III) intertwines into the initial tonics C (II) and Bm (IV) of the next movement after the model: D→T (I→II) and S→T (II→IV).

The small-scale harmony of the cycle systematically resounds the inversion of the key functions between the initial and final pairs of the movements. Movement I begins on the subdominant and shortly after reaches the tonic (i. e. S-T). It makes an inverse analogy to the relationship of the first and second movements of the cycle (i.e. T-S). In its turn, movement III begins on the tonic and soon reaches the Dorian subdominant (i. e. T-S) – again expresses a functional inversion, only this time on the scale of the last two movements (i.e. S-T). For the sake of evidence we present the following scheme (Scheme No 6):

Scheme No 6

Movements of cycle:	I (G)	II (C)	III (Am)	IV (Bm)
Key functions:	T	S	S	T
Harmony functions:	S-T		T-S	
Measures:	1–2		1	
	(harm. C-G)		(harm. a-D)	

Similar inversions of the key and harmonic functions characteristic of the cycle's whole and its separate movements are usually discussed in a traditional theory of music.

Micro- and macro- analogies and inversions display themselves not only on a harmonic but also thematic-intonational scale. Projecting the basic tones of the keys of the movements as an integral large-scale "macrointonation" (G-C-A-B), we shall see that a similar melodic configuration sounds at the beginning of movement I in high register, only in a varied way (Example 5: G-F-C-sharp-D). This analogy makes possible to guess a thematic-intonational integrity of all the movements of the cycle.

Macrointonation can be modelled in four known shapes – original, inverse, retrograde and retroinverse (O, I, R, RI). The melodic configurations of these shapes principally programme the most universal, even the most monogramic intonations of the cycle.

The uneven movements of the cycle (I and III) are distinctive through original and inverse (O and I) shapes, and the even (II and IV) – reverse (R, RI; Example 6). Incidentally, original shapes emerge at the beginnings of the movements (I, m. 1; III, m. 1). Retroinversions represent themselves in a similar way (II, m. 1; IV, m. 3–5). Quite a different thing is with other shapes. The latter emerge at certain points of turns. The inverse shape coincides with the beginning of the recapitulation (I, m. 13) or the golden section (III, m. 11), whereas retrograde – the climaxes (II, m. 7) or the beginning of the middle division (IV, m. 10).

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The presented thematic outline proves the structural character of the sequence of the movements of the cycle even clearer than the key plan.

Finishing off this section, we shall continue the analysis of the earlier noticed asynchrony of the dates and manuscript pages in two works (VL 327, 329).

In our opinion, the two mentioned works written down prior to the cycle witness certain traces of the search for the beginning of the cycle. The first of them seems from afar to slightly remind of the future beginning of the cycle, i.e. movement I mostly by the 4ths-note rhythm of the melodic structure and the subsequent falling 16-note passage (Example 7). It is true that in movement I the latter is modified into a rising scale.

Example 7

(VL 327)

The other work is a kind of the prototype of the future movement II of the cycle (Example 8), although fundamentally restructured and tonally distanced (B minor changed for C). The fact that it can be a possible prototype of movement II is simptomatically evidenced by a close rhythmical pulse (particularly the iambic accents in the upper-pitched part). The falling bass scale (semitone-tone) will be later only partly echoed by the rising 16-tone figurations of movement II.

Example 8

(VL 329)

Thus the dates of both works indicated by the composer (02 10 and 02 13) – a weighty motive witnessing the sequence of the movements in the cycle. Furthermore. A natural sequence of the prototype works seems to most convincingly prove the authentic, spontaneously discovered sequence of the first movement of the cycle. It is the mentioned fact that makes possible to motivate the sequence of the movements irrespective of the order the works are listed on the new manuscript (Čm 58).

Intentionality of the Cycle

Although the composer used to write down music without indicating almost any other notation symbols except notes[3], this original minimalism of a musical text has apparently nothing in common with the composer's indifference to other musical parameters – tempo, dynamics, articulation and the like. It is expedient, therefore, to interpret Čiurlionis' musical text as a certain economical means of writing down music, which intentionally hides all the rest musical parameters necessary for the characterization of the cycle and the structural whole of the work. Thus, the term intentionality here means the correlation and motivation of the musical parameters marked and unmarked by the composer (one of the Lat. *intentio* meanings – activity motive).

The motivation of the unmarked musical parameters by the composer, first of all those of the tempos, dynamics and partly articulation of the movements, necessitates a thorough analysis. Having in mind that a great many things in music take place in time, therefore, one of the most important determinants for the establishment of similar parameters is the proportionality of the movements of the cycle. It should be noted that each of the movements both finished and supposedly unfinished have their individual golden section. In respect of the cyclic aspect of

interest is its manifestation in the first and third one third of the cyclic form. For the sake of evidence we present the scheme witnessing the golden sections of the movements of the cycle. It indicates both the golden sections of each movement and their computation method (Scheme No 7):

Scheme No 7

Movements of the cycle:	I	II	III	IV
Golden section:				
3/3 of the form:	(17 t. x 0,618)	(22 t. x 0,618)	(19 t. x 0,618)	(26 t. x 0,618)
measures:	10,5	13,6	11,7	16
1/3 of the form:	(17 – 10,5)	(22 – 13,6)	(19 – 11,7)	(26 – 16)
measures:	≈ 7	≈ 9	≈ 7	≈ 10

The golden section in the first one third of the form as a rule coincides with the evident separation of the inner part of form, whereas in the third one third of the form the golden section is not so specific. It usually associates with a rather wide zone of indeterminacy and instability, embracing 2 or 3 measures. And so, the first golden section in movement I brings out the difference between the expositional and middle part (approx. with a semi-measure precision, m. 7), whereas the second coincides with the climax area (m. 10,5), shortly after (two measures later) leading to recapitulation. In movement II is similarly separated the middle part (m. 9) and marked the end of *preictus* to recapitulation (m. 13,6). In movement III, the golden sections bring out textural alterations in the *ostinato* process. The first – postexpositional (m. 7) and the second – a starting *preictus* stage (m. 11,7). In movement IV, alike in the previous ones, the mentioned section indicates the beginning of the middle part with a different texture (m. 10), whereas the second – the area of *preictus* (m. 16) shortly after leading to the recapitulation of the form.

The monotypicality of the expression of golden sections, irrespective of the formal completion or incompletion of the movement of the cycle, witnesses that all the movements belong to the integral group of the cyclic system works. Besides, an articulating importance of the golden section is rather evident. It brings out the internal part of the form of each movement and marks climax areas. It leads to the conclusion that the golden section is an intentional instrument for the articulation of contrasts and intensities of a separate movement.

Having in mind that in a cyclic system a separate movement is intentionally linked with the whole, it is expedient to find a similar proportional instrument on the scale of the whole cycle.

The most serious try-out in a similar situation seems to be a correct expression of the tempos of the movements of the cycle. The selection of exact tempos enables to discern the golden section of the cycle in the most expected place. Empiricism partly helps in the searches for optimal tempos. Therefore, it is useful to more attentively familiarize oneself with the tempos of the works offered by editors (Scheme No 8):

Scheme No 8

Movements of the cycle:	JČKF	VLKF
I		*Andante*
II	*Allegro non troppo* MM = 80	*Allegro non troppo*
III (unpublished)		
IV		*Andante innocente*

As one can see, V. Landsbergis marks the lateral (I and IV) works with slow tempos, but one work from the middle part (II), similarly like J. Čiurlionytė, – with a fast tempo.

The choice of tempos necessitates to take into consideration a modal contrast between the first and last pairs of the movements. The first two of them are composed in major keys (G and C) and their tempos could appropriately intentionally contrast in a similar way indicated by the editors (Slow, Fast). Whereas the last two are minor (Am and Bm), they can, therefore, reciprocally contrast in a similar way, but their tempos should follow in an inverted order (Fast, Slow). The inversion of this kind of tempos is intentionally based by the peculiarities of the key plan (we have earlier noticed the inversion of the kinship of functional keys in respect of the expositional pair of

keys of the movements). Besides, we suppose that the tempos of the major and minor keys of the works should be also intentionally nuanced. It is logical to slightly slow down minor works (both of fast and slow tempos).

These and similar intentional motives give a possibility to model the scheme of the cycle's proportions (Scheme No 9):

Scheme No 9

Movements of the cycles:	I	II	III	IV
Number of measures:	17	22	19	26
Metres:	× 3	× 4	× 4	× 3
	=	=	=	=
Total:	51	88	76	78
	=	=	=	=
M.M.:	56	88	84	52
Duration time-value:	= 0,9	= 0,9	= 0,9	= 1,5

Golden section:	$(0,9 + 0,9 + 0,9 + 1,5) = 4,2 \times 0,618 \approx 2,6$
I–III/IV:	$(0,9 + 0,9 + 0,9) \approx 2,6/1,5$
I–II/III–IV:	$4,2 - 2,6 = 1,6$
	$(0,9 + 0,9) \approx 1,6/2,4$

The scheme discloses the derivation of relative duration time-values of the movements of the cycle (sum of the fourth values and the relationship of the MM references). The latter make possible to orientate oneself in the proportions of the movements. Due to the fact that relative duration time-values represent the volume of each movement by relative units, it is easy to calculate golden sections.

The golden section in the third one third of the cycle falls on the junction of movements III and IV. It is symptomatic that the entire movement (III) is marked by an ostinatic preictus character. And what is more – the movement III is formally unfinished. Therefore, it is reasonable to believe that the latter should pass to the final movement without any break by way of *attacca*, similarly like pushing forward to recapitulation in separate movements of the cycle. Incidentally, the error in the relative duration time-value of the golden section is minimal – instead of 2,6, the time-value of division between movements III and IV – 2,7, i. e. I + II + III = 0,9 + 0,9 + 0,9. Here it is noteworthy that the tempos of the first three movements are chosen so that the duration time-values of the volumes of the works are equal (0,9).

The manifestation of the golden section in one third of the cyclic form is different. The latter almost coincides with the division of movements II and III or I + II and III + IV. The error in relative duration time-values is rather slight – instead of 1,6, the division practically marks itself in the time-value 1,8, i. e. I + II = 0,9 + 0,9. This golden section is also analogical to separate movements of the cycle where a similar proportion would bring out the articulation of internal parts of form. On the cycle's scale, the latter golden section marks itself by the formally finished movement II. A proportional separation is accompanied by a key – modal and textural contrast of the movements, what is characteristic, as we have seen of separate movements of the cycle (I, II, IV).

The presented scheme of the tempos and proportions of the cycles is one of possible orientativ-character models. It can slightly vary but preserving undamaged basic (mega- and macro-) intentionality features of the cycle.

The golden sections make possible to orient oneself in the basic contrasts of the cycle (juncture of movements II ant III) and a general culmination (movement III, particularly its second half).

Due to these reference points one can intentionally judge about the intensity of each movement of the cycle. One of the possible models is as follows (Scheme No 10):

Scheme No 10

Movements of the cycles:	I	II	III	IV
Dynamics:	*p*	*f*	*ff*	*pp*

Here the meanings of dynamics are conditional. In a broader sense, dynamics as a certain degree of the intensity of the movement.

Identification of the Cycle

The conducted structural analysis gives grounds to state that all the four works under investigation make up a certain integral cycle. However, the identity of this structure remains unindentified. If the cycle consists of four movements, certain analogies with known musical cycles and their structural peculiarities could be of use. They would enable at least to partly identify the supposed cycle.

The thematics of the cycle is particularly important for its identification. As we know, any themes of the cycle emerge due to a certain simultaneous expression of melodic and rhythmic aspects. Themes or the function of thematic motivation usually become clearer as soon as an appropriate thematic alternative is discovered. If a theme is rising, it is usually resounded by falling, whereas a trochaic motif is substituted by a iambic one. This known regularity rather often gives a possibility to discover principle subordinate motifs and themes of the composition even without associating the latter with a traditional key plan.

One can notice within the cycle some types of thematic motifs often reaching the level of themes, which through all the movements of the cycle, although getting strongly transformed, remain the same.

All the four movements of the cycle unfold four basic melodies of the themes which mutually compose a certain closed system of alternatives (Example 9). The example shows an orientational dominant scheme of thematic melodies. Here the melodic lines, as we can see, gradually fall or rise in the scale-reminding manner. In this way, the themes of the melodies from movements I and II as well as III and IV are contrasted. On the other hand, these pairs of melodic intonations, recalling falling and rising scales, are different from each other due to rhythmic opposition. The first pair of the scales is distinctive through iambic rhythmics (I-II), whereas the second – choraic (III-IV).

Example 9

The presented scheme makes possible to perceive an articulatory model of the movements of the cycle on the most general scale. Characteristic features of this model seem to include a binary polarity of the movements, manifesting itself through the alternatives of the melodic lines of the pairs of two initial and two final movements as well as a mutual opposition between both of the mentioned pairs in respect of their iambic and trochaic rhythmics.

These alternatives of a double character – melodic and rhythmic – speak of a two-level structure of a binary cycle. Thus, the polarity can be seen within the scope of one pair of the movements and between separate pairs. Besides, the two-level binary system is integrated into the system of a tonal cycle. The following scheme illustrates this phenomenon (Scheme No 11):

Scheme No 11

	I	II	III	IV
Melodic profile:	↓	↑	↓	↑
Key functions:	T(G)	S(C)	S(Am)	T(Bm)
Rhythms:	Iambic	Iambic	Trochaic	Trochaic
Modes:	Major	Major	Minor	Minor

It is easy to notice here that melodic directions (T ↑↓ and S ↑↓) undergo changes in respect of their tonal functions. It reminds more of a functional dynamics peculiar to such cycles. On the other hand, the iambic and trochaic differentiations of rhythmics coincide with the dissociation of the major and minor movements of the cycle. This synchrony of rhythm and modes seems to

stronger support the binary articulation of the cycle. The closed thematics of the movements (melodics of a scale character prevails in all the movements) also witnesses in favour of the tonal cycle. The mentioned factor draws the unrecognized cycle nearer to free variations known to Romantics. It is true that there is no traditional expanded coda and the reinforced integral basic key. But it could be partly compensated by a due balance between the tempos and proportions of the movements of the cycle.

Finally, the golden sections articulating the cycle facilitate to discern an expansion function characteristic of tonal cycles (here it coincides with movement III). The mentioned function stimulates one to think that the cycle unfolds itself by means of the functions peculiar to a sonata-form cycle (Scheme No 12):

Scheme No 12

Divisions of sonata form:	Exposition		Development	Recapitulation-coda
Themes (principal, subordinate):	PT	ST	(Preictus)	ST (PT)
Keys:	G	C	Am	Bm
Movements of cycle:	I	II	III	IV

A similar cyclic image is consolidated by the fact that separate functions of the themes, developing from initial motifs, reach independence of the separate movements of the cycle. For example, the theme in bass of the middle part in movement I slightly reminds of the inversion in the initial motif (Example 10: a, a_1). Isn't it a source giving rise to the emergence of the subordinate motifs and the theme of the cycle (II), at least in respect of an identical rhythmics (a_1)? The part of the middle division of movement IV is based on analogous rhythmics (a_2). The rhythmics in the episodes of movement III can be also fragmentally read (a_4). Something similar can be also noticed in respect of the basic part. The latter should be associated with the second motif of movement I (b: the iambic passage, m. 2–3), which in a rhythmically augmented form emerges in the theme (b_1) of movement IV (m. 10). The fragments of the basic theme can be noticed in the middle section (b_2) of movement II and the bass ostinato in movement III (Example 11).

Example 10

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Example 11

(VL 332)

The ciphergram made by D. Kučinskas

The identification of the unrecognized cycle is also possible employing instrumental suites of a romantic character, because the initial four-sound intonation (O), as we have noticed before, somewhat recalls a universal function of a monogram.

Summing up various features of the Unrecognized Cycle – the binary polarity of the movements, the sonata-form functionality, the variation character close to a romantic suite and the freely unfolded monogramic nature, the cyclic form can be identified as follows: a four-part binary-sonata-form-suite-form cycle[4].

Conclusions

The carried out analysis leads to the conclusion that M. K. Čiurlionis' four works for piano written in St. Petersburg, February 1909 (VL 330–333) form an integral musical cycle untitled by the composer and not analyzed by musicologists, which can be properly called Unrecognized Cycle.

It is the consistency and compactness of the arrangement of the chronological metrics and the manuscript autographs that give a possibility to partly judge about the probability of the Unrecognized Cycle. The principle of the cyclic sequence of the movements is motivated by the functional peculiarities of the tonal and harmonic plan of the works and the "macro" intonations (G-C-A-B) rising from the latter as well as by the logic of melodic modifications.

The principle of the cyclic sequence of the movements unfolded some traces of the search for the beginning of the cycle in the composer's earlier works (VL 327, 329).

The unmarked parameters of the cycle – tempos and dynamics – are intentionally linked with the system of the golden sections both on the scale of separate movements and the entire cycle.

The two cyclic form identities – binary and sonata-form – coincide in the Unrecognized Cycle.

The spontaneous criteria for the composing of the cycle are cardinally different and contrary to the editors' attempts to artificially and at their own discretion to group the composer's works.

The unfolding and the analysis of unrecognized cycles will open a new *čiurlioniana* page of great significance to the entire Lithuanian musical culture.

Abbreviations

JČKF — Čiurlionis M. K. *Kūriniai fortepijonui* (Works for piano, ed. by J. Čiurlionytė). Vilnius: Vaga, 1957.

VL — The list of M. K. Čiurlionis' works compiled by Vytautas Landsbergis (Landsbergis V., *Čiurlionio muzika*. Vilnius: Vaga, 1986, p. 223–296).

VLKF — Čiurlionis M. K. *Kūriniai fortepijonui. Visuma* (Compositions for piano. Completed). Kaunas, 2004.

DK — *M. K. Čiurlionis. Muzika. Katalogas* (Music. Catalogue, ed. by D. Kučinskas). Kaunas: Technologija, 2006.

KJŽ — Čiurlionytė-Karužienė V., Juodis S. E., Žukas V. *Mikalojus Konstantinas Čiurlionis. Bibliografija.* (Bibliography). Vilnius: Vaga, 1970.

Čm — New list of M. K. Čiurlionis' autographs introduced in the National M. K. Čiurlionis Museum of Art, since 1990.

References

[1] Landsbergis V. *Čiurlionio muzika*. Vilnius, 1986, p. 117.
Kučinskas D. *M. K. Čiurlionio fortepijoninės muzikos tekstas (Genezės aspektas)* [The text of M. K. Čiurlionis' piano music (Genesis' aspect)]. Abstract of Doct. Diss. Vilnius, 2002, p. 13, 21.
[2] DK, p. 24.
[3] VLKF, 104.
[4] For the notes see: VLKF or JČKF.

Santrauka

M. K. Čiurlionio Neatpažintas muzikos ciklas (1909 02)

Keturi M. K. Čiurlionio kūriniai fortepijonui, sukurti 1909 m. vasario mėnesį Peterburge (VL 331, 330, 332, 333), sudaro vientisą muzikos ciklą, kurio pats kompozitorius neįvardijo, o muzikologai netyrinėjo, tad jis vadintinas Neatpažintu muzikos ciklu.

Apie Neatpažinto ciklo tikimybę iš dalies galime spręsti pagal kūrinių chronologinės metrikos ir rankraščio autografų išdėstymo nuoseklumą bei kompaktiškumą. Ciklinės dalių sekos principą motyvuoja kūrinių tonacinio bei harmoninio plano funkciniai ypatumai ir iš pastarojo kylančios *makro* intonacijos (*a-c-a-h*), melodinių modifikacijų logika.

Ciklinės dalių sekos principas leido pastebėti kompozitoriaus ciklo pradžios ieškojimo pėdsakus ankstesniuose kūriniuose (VL 327, 329).

Nepažymėtos ciklo reikšmės – tempai, dinamika – intencionaliai susaistytos su „aukso pjūvių" sistema tiek atskirose dalyse, tiek ir visame cikle.

Neatpažintame cikle susilieja du ciklinės formos tapatumai – binarinis ir sonatinis-siuitinis.

Savaimingi spontaniški ciklo komponavimo kriterijai iš esmės skiriasi ir yra priešingi redaktorių bandymams dirbtinai, savo nuožiūra grupuoti kompozitoriaus kūrinius.

Neatpažintų ciklų nustatymas bei ištyrimas atvertų naują čiurlionianos puslapį, reikšmingą visai Lietuvos muzikos kultūrai.

Anna G. Piotrowska

Symphony in the 20th Century

In my article I would like to touch upon a few general issues concerning the condition of the symphony in the 20th century. Why is it still composed, why is it so diverse? And at what angles do the theorists tend to look on it notwithstanding this multitude? Hopefully, by arising these concerns some new light will be shed on the holistic image of this cycle in the 20th century and new perspectives will be established in reference to the development of the genre in the 20th century.

Is there any place for her?
or Is symphony dead?

The dramatically changing reality of the 20th century left its marks on composers and their choice of composed genres. While adapting to the new situation (resulting from such events as two world wars, globalisation effect, etc.) composers either consciously or subconsciously tended to prefer some genres and neglect others. Roger Sessions once remarked that "We often hear the query, for instance, whether this or that category of music is still 'alive' or 'dead' or 'dying' – *the* opera, for instance, *the* symphony, *the* concerto, or chamber music"[1]. That the symphony appears on that list is not a matter of coincidence. At the beginning of the 20th century Claude Debussy kept asking "Must we conclude that the symphony, in spite of so many attempted transformations, belongs to the past by virtue of its studied elegance, its formal elaboration and the philosophical and artificial attitude of its audience?"[2]. The "problem" of the condition of symphony in the 20th century perhaps to the best extend is illustrated by the specific situation of the purely instrumental music, which drew a lot of contemporary composers' attention.

As commonly known it was the 19th century European cultural tendency to assign a place of honour to instrumental music. Already in the novel "Herzensegießungen eines kunstliebenden Klosterbruders" published in 1797 and in the article "Symphonien" dated two years later early Romantic intellectuals, namely Wilhelm Heinrich Wackenroder and Ludwig Tieck asserted the instrumental music its high status, contributing at the same time much to the promotion of 'Absolute' music, though the actual term was coined half a century later[3]. The ascribed 'purity' of instrumental music was hailed as its divine quality – the sacrum aspect of music was mirrored in viewing it in almost religious terms. Wackenroder–Tieck way of thinking and writing about music was adopted by other authors, to mention Johann Gottfried von Herder, who as early as in 1793 already demanded the sacral contemplation of music[4]. In 1844 in the second volume of his monumental work "The World as Will and Representation" Arthur Schopenhauer concluded a special relation between music and will "because music does not, like all the other arts, exhibit the Ideas or grades of the will's objectification, but directly the will itself", the reason enough for the philosopher to proclaim music "a certainly independent art; in fact, it is the most powerful of all the arts, and therefore attains its ends entirely from its own resources"[5].

So pompously defined role of the instrumental music began, however, to be questioned in the early 20th century. The composer Hanss Eisler proclaimed in 1935 that purely instrumental music lost its impact and "...modern composers are of the opinion that 'absolute music' <…> cannot express anything definite at all, and certainly nothing about 'the urgent issues of our day'. Music without words, they say, cannot achieve this nor is it the purpose of music"[6]. Eisler criticism rests entirely on his philosophical bias. He argues that "by 1933 there were no longer any achievements of significance in this sphere and it is quite impossible to define the purpose of a symphony. So a really progressive composer will have to realize that this is a completely archaic art form, which should no longer be employed"[7]. By direct reference to the well established forms of musical life, whose rituals were aimed at the majority of wealthy city dwellers wishing to indicate and sustain their position within the society, Eisler suggests that "instrumental music and the concert <…> arose and developed within capitalist society and they enter a crisis when capitalist society enters a crisis"[8]. As a consequence 99 percent of listeners in the 20th century would say "Give us more entertainment music and less symphonies"[9]. This line of thinking was supported by American

composer Roger Sessions, who nearly 30 years later wrote a smashing diagnosis observing that "a good piece of popular music has a far better chance for what we call 'immortality' than a bad symphony"[10]. Both composers, although in different words, pinpointed two important issues:

1) in the 20th century popular music slowly, but consequently was overtaking the place of old genres including symphony;

2) old genres used to serve different social purposes, and consequently in the 20th century either they transformed in the process of adaptation or seemed doomed to die out.

Eisler sees symphony as the genre belonging to old predominance of instrumental music: the symphony embodied the expression of philosophical or religious aspirations, whereas 20th century symphony was merely a type of testing material and/or serving strictly utilitarian function as understood and defined by Gebrauchsmusik postulates[11].

Pondering on the topic whether it is worthwhile to compose a symphony Ernst Křenek deliberated over such a dilemma: perhaps there is no need, whatsoever, to conceive new pieces of music because old ones are still well functioning and being played by orchestras. The composer – quite honestly, even abruptly – says that "According to strict business standards, the manufacture of new symphonies, for instance, can be justified only, if the old ones are worn out beyond repair and if new ones can be made faster and cheaper and sold to more people than old ones"[12].

Harsh as it may sound the issue of the market demand for new symphonies proved a real obstacle for most modern composers. Most professional and semi-professional orchestras preferred to perform well established repertoire comprising of popular, wildly recognized symphonies. Especially Beethoven's place had been long asserted and unshaken: his compositions had been performed most commonly since the 19th century. For example, the Vienna Society of the Friends of Music put almost all Beethoven's symphonies in the programmes of their concerts held between 1817 and the year of Beethoven's death – 1827. In fact these concerts mostly featured Beethoven's works (total number twenty seven), proceeded by Mozart's (total number seventeen)[13]. Conductors and musical directors of most philharmonic halls of the 20th century remained interested mainly in Romantic symphonies, also because of the inherited from the previous epochs standardised grouping of instruments within an orchestra. Elliott Carter wrote: "Developed to play romantic music based on a common practice of standardized harmony, rhythm and counterpoint, of singing themes, of widening sonority by octave doubling, the orchestra seems to require this kind of music to justify its existence"[14]. Consequently orchestras and their leaders were interested only in such new symphonies, in which the instruments followed the late 19th century image of what the orchestra should sound like. Carter complained that "Because it is difficult to get multiple performances with American symphony orchestra, <...> composers do not write for this medium unless they are commissioned or have the stimulus of a prize contest"[15]. Because many composers of the 20th century felt that the orchestra as a medium "is dying"[16] they seriously considered not writing symphonic pieces any more. Even Lutosławski pondered whether or not to compose for large orchestras. "Is the symphony orchestra as such no more than a museum piece, a relic bequeathed to us by the generations that came before us? Or is it perhaps a living organism, showing no signs of age, with years of development still lying ahead of it?"[17]. That was a serious question to be answered as the efforts of composers trying to compose symphonies in the 20th century were often heavily criticised by other composers. Hans Henze said: "Between Stravinsky and Webern everything which still passes for symphony seems to be rejoinder, obituary, or echo"[18].

Is she still alive?
or Why composers wanted to write symphonies in the 20th century?

Despite all these difficulties it seems that symphony survived: in the beginning of the 20th century as a continuation of Romantic tradition and later the genre indeed managed to adapt to the new reality and find its place as the result of the process of re-establishing its status.

Performance opportunities

One of the modes the symphony as a genre sustained throughout the whole 20th century was the post Romantic tradition. Carter concluded in 1939 that "the magniloquent and grandiose symphonic style is the popular, prestige style of today"[19]. In fact in order to meet the demand coming from the philharmonic halls interested in that kind of repertoire composers, as Carter says

usually "European composers still feel the need, <...> to write for large orchestras and can get their works played because of state subsides – the Stalinist symphonies of Dmitri Shostakovich and quite a few recent Polish and German works"[20]. However, composers of such symphonies (including already mentioned Shostakovich and, for example, Sibelius) were accused, among others by Arthur Berger, of "being celebrated for the perpetuation of the nineteenth-century Romantic symphonic approach"[21], and sustaining the status of the icons of the "pro-Romantic propaganda"[22]. In *"Monsieur Croche the Dilettante Hater"* Debussy wrote that this type of the composer "is engaged in listening modestly to the voice of tradition which prevents him, it seems to me, from hearing the voice that speaks within him"[23].

Publishing opportunities

Honegger decided that monumental operas were not to be written but instead "All that remains are symphonies, sonatas, and other trifles"[24] especially in the vogue but still existent possibility of publishing these works. Apparently, Honegger says, publishers are prone to consider publishing "the works of great composers of genius who still amuse themselves by writing sonatas and symphonies"[25]. Although composers would still write symphonies, some of them, though, would call them differently. Tippet says that "In the present period many older composers find the traditional titles for instrumental forms confusing. It is no wonder that the younger composers mostly eschew such titles altogether, because in *avant-garde* oriented time, all received remains must be excluded if possible. Also the received titles such as 'symphony', 'concert', 'sonata', and 'suite' really are, at present, imprecise and confusing"[26]. Whether the name 'symphony' is really confusing or not is one thing, the other would be to what lengths composers went and what they did in order to have their symphonies published. Sessions mentions the situation in which "a very distinguished European composer <...> told me that his publisher had refused to publish any more symphonies. His comment was, 'So I just call them something else'"[27].

The final test of the composing skills/instrumentation

If a composer could prove(s) he is able to handle the orchestra(s), he could be nominated by other composers or pass in their eyes as a 'real' composer. In order to prove to conservatoire professors and the musical society that an aspiring composer perfected the art of composing producing a large piece of music began to be required, and symphony was often considered as a coronation of the conservatoire studies, especially in the light of the growing role of the art of instrumentation. Both, achievements of some composers in that field and the influential treatises on that subject (by H. Berlioz and N. Rimsky-Korsakov) made a lasting impact on composers in the early 20th century.

And indeed writing a symphony in the 20th century for most composers still remained the proof of their métier. Not only for traditionalists but also avant-garde composers because as Hindemith observed "the most radical inventors adhere to the traditional forms of the sonata and the symphony"[28]. That was perhaps the reason composers often confessed how much they wanted to compose a symphony. Suffice quote one of them, Henri Dutilleaux, who said "To put it more simply, without reference to anyone else I wanted to attempt this kind of work – to write a symphony – and I was happy trying"[29].

What does *a symphony* mean for 20th century composers?

As mentioned before the genre of symphony, in order to survive, needed to conform to new expectations posed on it. Consequently the understanding of what the symphony is in the 20th century changed among composers. Although they never abandoned the genre, quite often they transformed the meaning of the term *symphony*. Michael Tippett said that there are two possibilities of looking at the symphony: "The two contrasting conceptions or ideas of what is meant by a symphony are: a historical archetype <...> and a notional archetype"[30]. As a historical archetype Tippett understands, for example, the middle symphonies of Beethoven, this type of symphonies reached their peak in the past. As a notional archetype Tippett names, for example, Mahler's symphonies that permit "endless variations to the end of time"[31].

Completely different definition of a symphony – based on literary associations – was provided by Arthur Honegger, who compared a symphony "with a novel in which the themes are the

characters"[32]. An attempt to reflect on the symphony from a philosophical point of view was suggested by Roberto Gerhard, who in a rather pessimistic tone noted that "A symphony has perhaps no objective existence in reality"[33].

How to write about the 20th century symphony?

In the light of such an abundance of different ways of understanding what a symphony represents even among the 20th century composers writing about symphonies in the 20th century is never an easy task. Various approaches exist: for example, Stephen Walsh in the article on symphony in the *New Grove Dictionary* proposes to look at the 20th century symphony through the prism of geographical regions. He characterizes the development of the symphony after the year 1918 in France and Germany together, in the USA, Britain, in the USSR, later in Scandinavia and Eastern Europe as well as Germany after WWII [34]. Additionally Walsh singles out some composers whose input in the development of the genre in the 20th century (according to his opinion) justifies separate entries. These are: before 1918 Mahler, Sibelius and Nielsen, and after 1918 Stravinsky, Hindemith and in the USSR Shostakovich. This approach, celebrating the individuality of each composer writing symphonies in the 20th century was adopted by Preston Stedman[35] who in his book on the symphony's development from the Baroque to modern times devoted three out of eight chapters to the 20th century symphony. In his studies he wrote about Sibelius, Vaughan Williams, Prokofiev, Schostakovich, Stravinsky and Hindemith. Additionally, he characterized the symphony in America presenting examples from Harris, Schumann, Copland and Riegger compositions. In the section "Other 20th century symphonists" Stedman presented a list of other composers writing symphonies stemming from the USA, Britain, Poland, Russia, Germany and Austria, Scandinavia, and France as well as Latin America.

In the diversity of symphonies composed in the 20th century there can be distinguished, however, some common features. Not only are they present in the scores of symphonies, but composers themselves talked much about them. Most modern composers were very eager to write analysis and comments concerning their own works. They would often write in details about their own particular symphonies, as if proud of their achievements. After investigating a number of such analysis I established a few common themes most composers picked up in their texts, apparently important to all 20th century composers writing symphonies.

Form
Length

Symphony has always been considered a large form, despite the tendency of shortening its length (the appearance of sinfonietta in the 1880s). Aware of this fact Chavez noted that "actual size has a lot to do with the problem of form"[36]. The big size of a symphony called for a number of various musical solutions. "The large symphonic form demands, along with other things, themes and thematic complexes which permit themselves to be elaborated and worked together in closed movements and in various ways: contrasting sectional conceptions, dynamic crescendos and climaxes, and differing activities in typified and discrete movements"[37].

Closeness

Lutosławski observed that "the term 'symphony', in the same manner as the terms 'sonata', 'variations', and others, refers to the concept of a closed form"[38]. Having stated that he continues: "Composing closed forms, we also take large advantage of the fact that music is a form of art which does take place in time. Consequently, one of the reasons why we compose music is to evoke in the listener a series of specific reactions whose sequence and development in time is of essential importance to the final result, that is to the perception of the composition as a whole"[39]. In this continuum Lutosławski sees "a psychological aspect to the creation of musical forms"[40]. But the closeness of the form of a symphony can be also seen as a disadvantage and Lutosławski himself preferred opened forms.

Structure

The most important issue about the symphony remained the concept of its cyclic structure as such. Debussy adhered to the old tradition and wrote the following paragraph about structuring

the symphony: "A symphony is usually built upon a chant heard by the composer as a child. The first section is the customary presentation of the theme on which the composer proposes to work; then begins the necessary dismemberment; the second section seems to take place in an experimental laboratory; the third section cheers up a little in a quite childish way interspersed with deeply sentimental phrases which chant withdraws as is more seemly; but it reappears and the dismemberment goes on"[41]. Modern composers, although willing to challenge this old principle of the cycle were aware of the difficulties awaiting them in accomplishing such a task. Carlos Chavez observed that "It goes without saying that musical forms in our day are more elaborate and developed than in the early days, but they remain essentially A, A, A, etc., AB, AC, AD, etc., ABC, ABC, etc.; that is to say, prototype forms became archetype forms: ballade, rondo, sonata, etc."[42]. Consequently composers stayed faithful to them as the basic forms for music composition are relatively few. Especially because – as rightly pointed in 1978 by Gunther Schuller – the chance to create a new, good form "is given very few composers to achieve in any significant way"[43].

Coherence

What preoccupied composers, then, throughout the 20th century was the unity of the form called symphony and ways of achieving the coherence within a given piece of music. In 1961 Sessions wrote that first of all every composer will find himself preoccupied with such issues as "unity, coherence, rhythmic balance and balance of contrast, consistency of idiom"[44]. How are these achieved in the symphony? Or to repeat Furtwängler's question "How can we create an entity, a whole?"[45]. Furthermore, how can this be fulfilled without an effect of over-doing in such a large form as a symphony without so criticised abundance? Pierre Boulez commenting on the form in Webern's *Symphony* complained that it "is so rich that <...> canonic and mirror structures can be totally lost in ambiguity"[46].

Logics

It seems that in cyclic form of a symphony composers longed for "Simplification, logic, economy!"[47] as postulated by Honegger. He explained "...a symphonic work must be built logically, without the possibility of interjecting the slightest element between its different parts"[48]. Honegger advocated the logics, almost mathematical precision: "It has been said that architecture is frozen music, I should rather say that it is geometry in time. Here, as elsewhere, one must be very exacting, so as to achieve an absolute equilibrium"[49]. Hindemith agreed with him totally saying that "balance, evenness, and conscious proportionality – ideals which for the past hundred and fifty years or more have scarcely ever been postulated"[50].

Symmetry and repetition appear as fundamental factors contributing to establishing the postulated logics. Chavez wrote about symmetry that "Atavism has rooted symmetric rhythmical patterns very deeply in our subconscious"[51]. He was also baffled by the phenomenon of repetition in music: "To what degree is repetition, so connatural to us, actually to our pleasure?"[52]. He actually listed three situations where using repetition seems worthwhile. "Repetition is a way of making oneself understood quickly and unmistakably as in incantation. <...> Repetition has been the expedient employed to achieve unity with just enough variety <...>. Repetition is the condition of symmetry"[53].

Instrumentation

Most 20th century composers who wrote symphonies and also wrote *about* symphonies pondered on the topic of instrumentation. The already mentioned art of instrumentation never lost its impact. However, the new times required new and changed policy towards it. Carter wrote "If there is still any point in composing for orchestra, it is to treat the medium with as much novelty of concept as one does harmony, rhythm or any of the older musical methods, so rethought in our time <...>"[54]. The best solution it seemed to Carter was following: "To compose for the orchestra, as far as I am concerned, is to deal practically with the instruments, writing idiomatic passages for them, and, particularly, to compose music whose very structure and character are related to the instruments that play it. The combinations of instruments are as much a compositional consideration as the material they play even to determining the material, and all must reflect the over-all intention, the handling of the orchestra must have the same distinctiveness and character as the

other components of the work"[55]. This opinion was backed up by others. Peter Racine Fricker said "In fact, many composers today have turned away from this 'traditional' grouping [of instruments within an orchestra – *A. G. P.*], and I know of some who have stated openly that they have no interest whatever in the idea of writing for full orchestra. The emphasis is very often on smaller groups of mixed instruments, or divided groups of instruments used antiphonally. <...> The composer, faced with these conditions [the ones Carter wrote about – *A. G. P.*], has very often preferred to write for a smaller select group: highly skilled individuals, especially gathered for a festival, or for a radio performance. <...> Unless the composer is rewarded by a commission, or at least is stimulated by the premise of an adequate series of performances, he is, on the face of it, unlikely to choose to write a piece for full orchestra"[56]. Composers turned to various possibilities instruments of symphonic orchestra offered. Lutosławski observed that "One way out is simply to ignore the limitations of the instruments, to idealize them, to treat them abstractly, in a manner unrelated to actual practice. <...> not bound by the restrictions inherent in tradition"[57]. But Lutosławski confessed also that scores conceived this way are "often difficult to compose" and he personally found "this method entirely impractical to my purpose"[58]. Another possibility – according to Lutosławski – "Experimenting with new way of playing old instruments is still another way of trying to find a solution to the problem" but personally he found it "exceedingly unnatural"[59]. He says, however, that "My critical remarks <...> are not meant as criticism of the composers who employ these methods"[60].

The exploitation of new instruments seemed to be favored by some composers. Wladimir Vogel observed "The expansion and introduction of new or previously little-used instruments, particularly of percussive and other distinctive timbres"[61]. He renounced in orchestral instrumentation "excessive effects of tone-color in favour of 'limited' classical instrumental sonority"[62]. On the other hand, many composer turned to smaller orchestras or even preferred the homogenous groupings of string instruments. Already in 1921 Bliss wrote that "the custom of the moderns to make the instruments function in the most independent way possible has given rise in late years to the growth of the chamber orchestra, an orchestra of 10 or 12 players, shall we say, all soloists, in the texture of whose ensemble the particular timbres stand out like coloured threads is a variegated carpet"[63].

To compose symphonies in the 20th century was never an easy task. Composers and their works were always the target of criticism. As Honegger remarked: "...the young modern composer's symphony has all the disadvantages as compared to a great classical symphony"[64]. Despite all the difficulties the genre of symphony has survived. It managed to prove that its versatility is the secret source of survival of that genre.

Notes

[1] Roger Sessions, *Questions about Music*, Harvard University Press, 1970, p. 136.

[2] Claude Debussy, *Monsieur Croche the Dilettante Hater* in: *Contemporary Composers on Contemporary Music*, ed. Elliott Schwartz and Barney Childs, New York: Da Capo Press, 1978, p. 19.

[3] See Daniel K. L. Chua, *Absolute Music And the Construction of Meaning*, Cambridge: Cambridge University Press, 1999, p. 3.

[4] See Carl Dahlhaus, *Idee der absoluten Musik*, Kassel–Basel–Tour–London: Bärenreiter-Verlag Vötterle, 1978, p. 87.

[5] Arthur Schopenhauer, *The world as Will and Representation*, trans. E. F. J. Payne, New York: Dover Publications, 1966, p. 448.

[6] Hanns Eisler, *Some Remarks on the Situation of the Modern Composer* (1935) in: Hanns Eisler, *A rebel in Music*, Berlin: Seven Seas Publishers, 1978, p. 108.

[7] Hanns Eisler, *Some Remarks on the Situation of the Modern Composer* (1935) in: Hanns Eisler, *A rebel in Music*, op. cit., p. 108.

[8] Hanns Eisler, *Some Remarks on the Situation of the Modern Composer* (1935) in: Hanns Eisler, *A rebel in Music*, op. cit., p. 108.

[9] Hanns Eisler, *Labor, Labor Movement and Music* (1938) in: Hanns Eisler *A rebel in Music*, op. cit., p. 132.

[10] Roger Sessions, *The Musical Experience of Composer, Performer, Listener*, New York: Atheneum, 1967, p. 41.

[11] Hanns Eisler, *The Crisis in Music* (1935) in: Hanns Eisler, *A rebel in Music*, op. cit., p. 117.

[12] Ernst Křenek ,*The Ivory Tower* in: *Exploring Music. Essays by Ernst Křenek*, transl. Margaret Shenfield & Geoffrey Skelton, London: Calder and Boyars, 1966 (first published in 1958), p. 161–162.

[13] See Kurt Blaukopf, *Musical Life in a Changing Society*, Portland: Amadeus Press, 1982, p. 66.
[14] *Elliott Carter* in: *The Orchestral Composer's Point of View,* ed. Robert Stephen Hines, Norman University of Oklahoma Press, 1970, p. 47.
[15] Elliott Carter, *The Writings of Elliot Carter. An American Composer Looks at Modern Music*, ed. Else Stone and Kurt Stone, Bloomington: Indiana University Press, 1977, p. 284.
[16] Elliott Carter, *The Writings of Elliot Carter. An American Composer Looks at Modern Music*, op. cit., p. 286.
[17] *Witold Lutosławski* in: *The Orchestral Composer's Point of View,* ed. Robert Stephen Hines, Norman University of Oklahoma Press, 1970, p. 129.
[18] *Hans Werner Henze* in: *The Orchestral Composer's Point of View,* op. cit., p. 104.
[19] Elliott Carter, *The Writings of Elliot Carter. An American Composer Looks at Modern Music*, op. cit., p. 65.
[20] Elliott Carter, *The Writings of Elliot Carter. An American Composer Looks at Modern Music*, op. cit., p. 289.
[21] Arthur Berger, *Reflections of an American Composer*, Berkeley: University of California Press, 2002, p. 37.
[22] Arthur Berger, *Reflections of an American Composer*, Berkeley: University of California Press, 2002, p. 37.
[23] Claude Debussy, *Monsieur Croche the Dilettante Hater* in: *Contemporary Composers on Contemporary Music*, op. cit., p. 19–20.
[24] Arthur Honegger, *I am a Composer*, transl. Wilson O. Clough, London: Faber and Faber Ltd, 1966, p. 36.
[25] Arthur Honegger, *I am a Composer*, op. cit., p. 44.
[26] *Michael Tippett* in: *The Orchestral Composer's Point of View,* op. cit., p. 203–204.
[27] Roger Sessions, *Questions about Music*, op. cit., p. 136.
[28] Paul Hindemith, *A Composer's World. Horizons and Limitations*, Cambridge: Harvard University Press, 1952, p. 119.
[29] Henri Dutilleux, *Music-Mystery and Memory*, Hants: Ashgate, 2003, p. 36.
[30] *Michael Tippett* in: *The Orchestral Composer's Point of View,* op. cit., p. 204.
[31] *Michael Tippett* in: *The Orchestral Composer's Point of View,* op. cit., p. 204.
[32] Arthur Honegger, *I am a Composer*, op. cit., p. 74.
[33] Roberto Gerhard, *The contemporary musical situation* (1956) in: Roberto *Gerhard Gerhard* on Music, Ashgate, 2000, p. 24.
[34] Stephen Walsh, "Symphony" (part III "20th century") in: Sadie S. (ed.), *New Grove Dictionary of Music and Musicians*, MacMillan Publishers, Ltd, 2001, pp. 841–847.
[35] See Preston Stedman, "The Symphony", Prentice Hall, Inc., 1979.
[36] Carlos Chavez, *Musical Thought*, Cambridge, Massachusetts: Harvard University Press, 1961, p. 53.
[37] *Wladimir Vogel* in: *The Orchestral Composer's Point of View,* op. cit., p. 221.
[38] *Witold Lutosławski* in: *The Orchestral Composer's Point of View,* op. cit., p. 133.
[39] *Witold Lutosławski* in: *The Orchestral Composer's Point of View,* op. cit., p. 133.
[40] *Witold Lutosławski* in: *The Orchestral Composer's Point of View,* op. cit., p. 134.
[41] Claude Debussy, *Monsieur Croche the Dilettante Hater* in: *Contemporary Composers on Contemporary Music*, op. cit., p. 19–20.
[42] Carlos Chavez, *Musical Thought*, op. cit., p. 50.
[43] Gunther Schuller, *Toward New Classicism?* in: *Musings. The Musical Worlds of Gunther Schuller*, OUP, 1986, p. 180.
[44] Roger Sessions, *Style and "Styles in Music* (1961) in: *Roger Sessions on Music*, Princeton University Press, 1979, p. 89.
[45] Wilhelm Furtwängler, *Observations of a Composer* in: Wilhelm Furtwängler, *Furtwängler on Music* (ed. and transl. Ronald Taylor) London: Scolar Press, 1991, p. 24.
[46] Pierre Boulez, *Boulez Conversations with C. Deliege*, London: Eulenburg Books, 1976, p. 101.
[47] Arthur Honegger, *I am a Composer* (transl. Wilson O. Clough), London: Faber and Faber Ltd, 1966, p. 52.
[48] Arthur Honegger, *I am a Composer*, op. cit., p. 79.
[49] Arthur Honegger, *I am a Composer*, op. cit., p. 79.
[50] Paul Hindemith, *A Composer's World. Horizons and Limitations*, op. cit., p. 118.
[51] Carlos Chavez, *Musical Thought*, op. cit., p. 51.
[52] Carlos Chavez, *Musical Thought*, op. cit., p. 54.
[53] Carlos Chavez, *Musical Thought*, op. cit., p. 77.
[54] *Elliott Carter* in: *The Orchestral Composer's Point of View,* op. cit., p. 49.
[55] Elliott Carter, *The Writings of Elliot Carter. An American Composer Looks at Modern Music*, op. cit., p. 290.
[56] *Peter Racine Fricker* in: *The Orchestral Composer's Point of View,* op. cit., p. 77.
[57] *Witold Lutosławski* in: *The Orchestral Composer's Point of View,* op. cit., p. 130.
[58] *Witold Lutosławski* in: *The Orchestral Composer's Point of View,* op. cit., p. 130.
[59] *Witold Lutosławski* in *The Orchestral Composer's Point of View,* op. cit., p. 131.
[60] *Witold Lutosławski* in: *The Orchestral Composer's Point of View,* op. cit., p. 131.
[61] *Wladimir Vogel* in: *The Orchestral Composer's Point of View,* op. cit., p. 222.
[62] *Wladimir Vogel* in: *The Orchestral Composer's Point of View,* op. cit., p. 222.
[63] Arthur Bliss, *What Modern Composition Is Aiming At* in: *As I remember*, London: Faber and Faber, 1970, p. 253.
[64] Arthur Honegger, *I am a Composer*, op. cit., p. 29.

Santrauka

Simfonija XX amžiuje

Pranešimas yra skirtas XX a. simfonijos žanrui. Nors šiame žanre amžiaus pradžioje įvyko daug revoliucingų pokyčių, jis išliko beveik visų šiuolaikinių kompozitorių kūryboje, tačiau patyrė ir nemažai transformacijų. Tarp jų galima paminėti ir formą, kuri buvo naujai traktuojama, atsižvelgiant į vyraujančius postulatus. Vis dėlto kompozitoriams šis žanras išliko labai svarbus kaip jų kūrybinės veiklos simbolis.

XX a. išryškėjo kelios raidos kryptys: nuo vėlyvojo romantizmo pasiekimų tęstinumo per išlikusias klasikines ir net barokines tradicijas iki visiškai naujų technikų įsisavinimo. Pranešime nagrinėjamos XX a. simfonijos problemos, mėginama pristatyti naują šio žanro tipologiją ir atkreipti dėmesį į naujas alternatyvas.

Analitinė pranešimo dalis pagrįsta daugiausia XX a. pirmos pusės Europos ir Amerikos (taip pat ir Lotynų Amerikos) kompozitorių simfonijomis. Be abejo, bendros XX a. simfonijų tendencijos, būdingos vis labiau globalėjančio pasaulio muzikai, reikalauja sisteminės sintezės, kadangi dauguma literatūros apie simfonijos žanrą nagrinėja klasikinį ir romantinį laikotarpius ir/arba greičiau pateikia atskirų simfonijų interpretacijos galimybes, o ne nušviečia bendrą XX a. simfonijos žanro situaciją.

Audronė Žiūraitytė

The Phenomenon of Cyclic Form
in Onutė Narbutaitė's *Tres Dei Matris Symphoniae*

Tres Dei Matris Symphoniae (2003), a recent cycle of three symphonies by Onutė Narbutaitė, displays most vividly the originality of the composer's worldview and an individual treatment of and the cyclic form. Her work does not strictly adhere to the canons of religious music (albeit making use of some religious texts, such as *Stabat Mater, Ave Maria, Gloria*, etc.), but this does not undermine the intensity of religious feeling expressed therein. To enter that religious dimension, the composer makes multiple references to myths and rituals, which, connected to certain archetypes, symbols. They facilitate the comprehension of the sacred art. Narbutaitė has indicated some of her resources in the following commentaries:

> "*Certainly, there are links with many different things in my piece: I have drawn inspiration from both early and classical music, from mediaeval art and from the reflections on these themes written in different epochs. At the beginning of the score I drew a triangle – the symbol of the Holy Trinity – which also symbolically represents the three parts of the work: a descending line stands for the Annunciation, a horizontal line – for the Nativity and an ascending line – for the Crucifixion.*"[1]

The work's three movements thus embrace three pivotal moments in the life of Mary related to Christ – the Annunciation, the Nativity and the Crucifixion. The first movement contains the seeds of all consequent music, just like the Angel's Annunciation to Mary had foreordained all future events. Thus the first movement is called "Angelus Domini" ("The Angel of God"); the second is called "Bethleem"; and the third depicts "Mater Dolorosa" ("The Sorrowing Mother"). There is also a short introduction – "Introitus" – set to the fragment from the *Song of Songs*, and a short epilogue called "Oratio" ("Prayer"), in which the text by Hildegard von Bingen is used. The third movement is set throughout to the traditional text of *Stabat Mater*, whereas *Ave Maria* is used in the first movement and the first lines of *Gloria* in the second.

> "*The most fascinating thing for me was that these references opened a vast field of associations, in which one can freely play and interact with both listeners and performers and, at the same time, unearth multilayered deposits that are inevitably bound not only to the structures of the work, but also to our existential experience as human beings.*"[2]

The first movement, "Angelus Domini (symphonia prima)", is undulating with broad orchestral waves – moments of tension and resolution – which create a mysterious image of cosmic chaos, of "prematerial infinity" (according to Bohdan Pociej) that brings about a sensation of the divine.[3] The musical material, on the other hand, gives a clear sense of direction towards its foreseeable goal, leading to a miracle of the Annunciation and the Angel's hymn ("And the angel then started singing"). The brass chorus "chants like angels" while the choir recites the text of *Ave Maria* (see Figure1; pages of the score manuscript).

The first movement's overall dramaturgy of timbres and the resourceful use of compositional procedures seem to betray the composer's aim to keep all instruments in dynamic and semantic balance. This effect is achieved in several ways: via cyclic motion from the state of rest to the state of extreme dynamic tension and via the procedures of microdynamic compensation which depend on the rules of voice leading.[4]

The prominent role of contrast in this work was also emphasised by the German critics after the work's première at the Musikfesttage an der Oder in March 2004:

> "*From the outset*, Tres Dei Matris Symphoniae *is reigned by extremely impressive contrastive dramaturgy. Light is contrasted with darkness, noise — with silence. The rippling sonic surfaces give way to gloomy and ominous whirls. Pleading is suddenly suffused with rebeliousness. <...> However, in this paticularly intense composition marked with religious mysticism, the limit of excessive sensitivity and ceremoniousness is never transgressed.*"[5]

Figure 1. O. Narbutaitė. *Tres Dei Matris Symphoniae*, 1st movement, p. 54.

In terms of form, "Symphonia prima" is a self-contained symphonic piece, but at the same time it is a basis for the entire cycle of three symphonies. Onutė Narbutaitė has indicated some of the principles underlying her treatment of cyclic form and repetition in the section titled "Arches" of the brochure "*Tres Dei Matris Symphoniae*":

> "Arches, vaults, symmetric proportions, recurring details.
> The central, great arch – or a bridge – spanning the first and the third symphonies. <...>
> ANGELUS DOMINI pp. 27–42 = pp. 50–65 MATER DOLOROSA
> Small arches.
> The third symphony MATER DOLOROSA:
> pp. 6–7 = pp. 72–73, leading to Stabat Mater and bringing solace shortly thereafter.
> Another arch, quite small but sharp enough to be grasped by ear, joins the first and the second symphonies: seven bars of ANGELUS DOMINI between rehearsal marks 31 and 32 = five bars after the rehearsal mark 41 up to 42 in BETHLEEM.
> Other repetitions.
> Seven lashes of tutti, connected with the seven-note motif in the trombone part, which cross thrice the Stabat Mater and reappear in three bars of 3/4 time on pages 4, 24 and 36 of MATER DOLOROSA. <...>
> Chords, prefigured in the very beginning on page 6, appearing in complete form at rehearsal mark 3 and recurring on pages 17, 19–20 and 23, become the harmonic basis for Stabat Mater in the third symphony.
> The initial motifs in the flutes entail the subsequent development of melodies in the brass. Recurrences of instruments and timbres that change in colour and expression but remain recognisable."

The energetic intensity of flowing and ebbing waves in the second movement, "Bethleem (symphonia secunda)", becomes reduced and changed in character. Prevailing mood here, especially in the beginning, is that of self-communing, meditation, which is emphatically suggested by the sonoristic textures (see Figure 2). The choir is treated here mostly as a 'sonoristic instrument', even though it specifies once again the sphere of *sacrum* by performing the text of *Gloria* in the climax. The latter (p. 68), which, from the semantic point of view, is the most luminous in the whole cycle of three symphonies (see Figure 3).

The third movement, "Mater Dolorosa (symphonia tertia)", continues the 'sacred narrative' by using texts that help reach the reality of *sacrum* (*Stabat Mater*). On the other hand, this movement can be seen as a recapitulation of the entire symphonic cycle. Rendered in tragic tones, it is very characteristic of the finales and closing movements in many of Narbutaitė's works. Dynamic waves in "Mater Dolorosa (symphonia tertia)" are even fewer and father between than in the second movement. But there is one eminent and painful rise from p. 49 to the arch on p. 78. Tolling bells and energetic intensity of the musical fabric enhance the foreboding of tragedy. When the strophes of *Stabat Mater* come to an end, an extensive restatement of the material used in the first movement begins (pp. 27–42 = pp. 50–65), thus closing a great central arch and fulfilling painful predictions. The opening and closure of the third movement are more clearly defined than in the other two movements. A moment of transition from the first to the second movement is somewhat obscured by the sonoristic nature of musical textures. The "Symphonia tertia" can thus be regarded and understood as an independent entity – as a "Stabat Mater", consisting of two sections – first choral and then instrumental. The latter feels like a tragic outcome that reveals the meaning of the text even without the text.

Between the tragic foreboding in the first movement and the tragic outcome in the third, the second movement emerges as a realm of light and comfort, as *Adagio*, which corresponds both to the composer's "narrative" reality of *sacrum* ("Nativity") – and to the concept of symphonic cycle. Understanding symphony in a broader metaphorical sense (harmony, agreement, concordance), we would agree with the composer's opinion:

> "*I used the term 'symphony' for the title quite consciously: I was composing a symphony, not an oratorio. Here, the role of the choir is much less significant than that of the orchestra, albeit very important in some episodes. It is fully brought to the fore only once – in the third movement written to the text of Stabat Mater. But from the middle of that movement the initiative is taken over by the orchestra. Besides, the concept of a symphony in the sense of a consonance, harmony, was willingly employed by Hildegard von Bingen, the text by whom I used for the final 'Oratio'".*

Figure 2. O. Narbutaitė. *Tres Dei Matris Symphoniae*, 2nd movement, p. 1.

Figure 3. O. Narbutaitė. *Tres Dei Matris Symphoniae*, 2nd movement, p. 68.

In concluding the argument about the genre definition of *Tres Dei Matris Symphoniae* another quote from the composer's commentaries seems pertinent:

> "*Since German musicians have already performed my oratorio* Centones meae urbi *some time ago, I wanted to make something different. Here, I came up with an entirely different solution: large orchestra, great consistency of the work. All thematic material lies encoded in the first movement. One theme, one language... Essentially, it is a work for the symphony orchestra and for the concert stage. And it is a symphonic work, not an oratorio – hence the title.*
> *This does not correspond to a received opinion that voice is superior in the liturgical music or one related to liturgy.*"

Within the scope of interaction between the *sacrum* (liturgical texts) and the *profanum* (classical symphonic music) the composer seems to transgress the established canons of the Christian liturgy, on the one hand, and classical genre, on the other. Her work may be seen as a continuation of romantic tradition in symphonic genre: her work consists of three individual symphonies combined in one coherent cycle.

Notes

[1] See composer's commentaries in the brochure "*Tres Dei Matris Symphoniae*" specially compiled by Narbutaitė for the work's Lithuanian premiere (14 October 2004) and containing many texts that were used as a source of inspiration but not directly set to music. *Tres Dei Matris Symphoniae* comissioned by the "Brandenburgisches Staatsorchester" and "Musikfesttage an der Oder" Festival, premiered by "Grosser Chor der Singakademie Frankfurt", "Aidija" choir, Brandenburgisches Staatsorchester, conductor Robertas Šervenikas (6 March 2004, Frankfurt).

[2] From the composer's talk at the National Philharmonic before the premiere.

[3] See Bohdan Pociej, "Religinė inspiracija muzikoje" ["Religious Inspiration in Music"], *Krantai* 1990, No. 7–8, p. 32.

[4] Mikhail Kokzhayev, *Topologia muzykalnogo prostranstva* [*Topology of Musical Space*], Moskva: Kompozitor, 2004, p. 45.

[5] Peter Buske, "Das Wesen Maria ergründen" ["To Fathom the Nature of Mary"], *Märkische Oderzeitung*, 8 March 2004.

Santrauka

Ciklo fenomenas Onutės Narbutaitės *Tres Dei Matris Symphoniae*

Tres Dei Matris Symphoniae įtvirtina O. Narbutaitės pasaulėjautos originalumą, savitą ciklo traktuotę. Kompozitorė nesilaiko religinės muzikos kanonų (nors naudoja *Stabat Mater, Ave Maria, Gloria* ir kt. tekstus), tačiau tai nesumenkina juose reiškiamo religinio jausmo gylio. Kūrinio pagrindą sudaro trys Marijos gyvenimo momentai, susiję su Kristumi: apreiškimas, gimimas ir nukryžiavimas.

I dalis *Angelus Domini* (*Symphonia prima*) pilna orkestrinių bangų siūbavimo, įtampos ir atoslūgio opozicijų, sudarančių paslaptingą kosminio chaoso „ikimaterialios begalybės" (B. Pociej) įspūdį, priartinantį Dievo suvokimą. *Symphonia prima*, būdama išbaigtos, simfoniškai plėtojamos formos, drauge yra trijų simfonijų ciklo pagrindas. Cikliškumo, kartojimo principus O. Narbutaitė pati nurodė knygelės-anotacijos dalyje „Arkos". II dalyje *Bethleem* (*Symphonia secunda*) pakilimo ir atoslūgio bangų energetinis intensyvumas mažesnis, kitokio pobūdžio. Čia, ypač dalies pradžioje, vyrauja įsiklausymas į save, meditatyvumas, kurie išreiškiami pabrėžtinai sonoriniu muzikos audiniu. III dalis *Mater Dolorosa* (*Symphonia tertia*) tęsia „siužetinę" liniją, žodžiais priartindama *sacrum* tikrovę (*Stabat Mater* tekstas). Kita vertus, ši dalis tampa simfoninio ciklo repriza. Ji pasižymi tragiška finalo, baigiamųjų kūrinio dalių koncepcija, apskritai būdinga O. Narbutaitės kūrybai. III dalies ribos savarankiškesnės, nes perėjimą iš I į II dalį niveliuoja sonorinė muzikos audinio kilmė. Taigi *Symphonia tertia* galime traktuoti ir atsietai nuo simfoninio ciklo, kaip *Stabat Mater.* Tarp I dalies tragizmo nuojautos ir III dalies „tragedijos" II dalis iškyla kaip šviesiausia, tarsi *Adagio.* Tai atitinka tiek „programinę", autorės kuriamą *sacrum* tikrovę (apreiškimas, gimimas ir nukryžiavimas), tiek simfoninio ciklo koncepciją.

Kūrinio sąranga vientisa, simfoninė, choro vaidmuo čia mažesnis nei orkestro. Tai trys atskiros simfonijos ir drauge vientisas simfonijų ciklas, įspūdingas muzikos religingumu, šventumu. Daugelyje O. Narbutaitės kūrinių vyrauja metaestetinės vertybės. Didžiausia iš jų – *sacrum* – dėl vidinių ir išorinių veiksnių sintezės sukoncentruota *Tres Dei Matris Symphoniae.*

Svetlana Barkauskas

Two Vytautas Barkauskas' Trilogies – Two Different Principles of Cycle Structuring

Creation of V. Barkauskas is characterised by a great variety of cycle forms: from allusion to baroque suite for solo instrument up to large instrumental cycles – trilogies[1]. The aim of article is to attract your attention to the phenomenon of two large cycles created by the composer Vytautas Barkauskas: why they are interesting and peculiar and how they differ from others.

One of V. Barkauskas' trilogies is "**Three Legends about Čiurlionis**", works for piano. Another trilogy consists of works of different genres and instrumental cast: **Concert for Viola** and Chamber Orchestra, **Sextet** for two violins, viola, cello, doublebass and piano, the **Fifth Symphony** for big Orchestra. These both cycles are peculiar as they were not planned beforehand and they have never been announced as cycles. The titles of the works and their appearance is the evidence of the fact that beforehand the author had no idea to develop the same idea and to create a cycle.

When we look at the list of V. Barkauskas works we do not find the work with the title "Three Legends about Čiurlionis". There are: "The Legend about Čiurlionis"[2] op. 30, 1972, "The Second Legend about Čiurlionis" op. 87, 1988 and "The Third Legend about Čiurlionis" op. 102, 1993. Though the author himself does not indicate the presence of the cycle, the cycle is easily recognized even according to the outward traditional features of the cycle – common title, common genre (legend) and common instrumental cast (for piano solo).

All these works have been written specially for international Čiurlionis pianists and organists competitions. V. Barkauskas remembers: "In 1971, the order to create a piece for the piano competition was received. I called it "The Legend about Čiurlionis", as for me Čiurlionis had been some kind of a legend and a very nice personality of our past. I find his artistic world to be real and at the same time unreal, fairylike, not revealed to the end, fabulous". Further the composer explains: "When many years later (16 years later) a new order was received for the competition – I understood there was a need to continue the old idea. I did not want any borrowings from Čiurlionis works and the title "the legend" was a very good reflection of the essence of Čiurlionis. Therefore the next piece for the competition was called "The Second Legend about Čiurlionis". If the First Legend spoke more of the inner world of Čiurlionis pictures, so the second revealed the tragedy of Čiurlionis personality. When I received one more offer to create for the competition (it was 5 years later), I knew at once – it would be the Third Legend, which would continue and would combine the First and the Second. I also knew that I would not write the Fourth Legend. I had hopes to hear all the three legends in one concert performed one after another, and I heard them all in 2004"[3].

Under such circumstances creative process (and its result) differs from the process when cycles are planned beforehand and there is a creative plan (of parts, instrumental cast, measures, duration etc.) and perspectives. V. Barkauskas did not intend to write the next legend. Besides, he was writing for the pianists' competition and he had to give the possibility for performers to express themselves to the full. Therefore the author remained true to the idea realization of each legend. The result was a greater self-sufficiency of each cycle part as the legends had been written in large intervals embracing the period of 20 years. It is natural that evolution of V. Barkauskas musical thinking, composition technique and style is clearly felt in the cycle.

However, all three legends comprise a united complete cycle! The composer himself noted the reason: "Of course, when I started writing the Second Legend I had to remember the First, and when writing the Third – both of them, the First and the Second. Then I understood that they could sound as a cycle "Three Legends about Čiurlionis".

One can understand the difference: when the cycle is planned beforehand, so one looks forward, and when it is not – you turn back. The differences in thinking are obvious when planning a cycle beforehand or not. Do they change the cycle? It is difficult to say, because in both cases the main feature of the cycle – relations between the two dimensions (that is self-sufficiency and community) remain.

What unites all the legends? What is common among them?

Firstly, the very title unites. Secondly, – the idea of Čiurlionis, i. e. – revealing main features of Čiurlionis, those of the human being and those of the artist, showing the duality and tragedy of his romantic hopes. Therefore in every legend we find: a) contrasting and conflicting dramaturgy; b) similar movement dynamics with a tragic aspect – falls are longer than rises or energetic (*impetuoso*) rising ends in a static desperate repetition as if failing to achieve the aim desirable; c) a wide polyphonic space of many layers where vocal distances are wide, and we hear the bell ringing, the echo, the sound coming nearer and again further and finally its disappearance (*al niente*); d) similar semantic codes-symbols (instead of thematic repetitions) – i. e. symbols of fate, resignation, hope, pain, ideals illusion, melancholy, energy, menace and other.

All the legends are united by the narration character that might be called "fabulous". First of all, the tempo and rhythm of the performance should be noted. E. g. in the First and in the Third Legend the author indicates *tempo rubato* or *poco rubato*, uses various tempo precipitations and slowups, does not indicate a metre and there are no bar lines. But the changes in tempo are indicated by the metronome. In the Second Legend the tempo is indicated as there are complex metre-rhythmical relations of both hands the right and the left, and the metre is often changing. Tempo changes are frequent, and a free rhythmical grouping is being used.

Intonation links give unity for the work. The most typical intervals of all three legends are minor second, minor third and fifth.

Besides inward uniting relations resulting in the common idea there exist very distinct uniting relations when going from one legend to another, in other words, the beginnings and ends of all the legends have got very interesting connections. Especially it is felt listening to the whole cycle, i. e. three legends in a turn, one after another.

The First Legend starts with melodic-harmonic intonation of minor second "H–C"(Example 1).

Example 1

At the end of the work the composer introduces melodic quint "G♯–D♯", sounding with the ten sound cluster (i. e. the full 12-tone series). Barkauskas uses a surprising effect (in all the work there was no melodic fifth) and this interval gains a symbolic significance, the illusion of achieving the ideal (Example 2). *Smorzando* leading the upper fifth sound into infinity turns the very fifth into mirage – it has appeared and vanished. Later it appears it has not vanished. 16 years later fifth becomes the main interval of the Second Legend.

Example 2

The **Second Legend** starts with a semitone higher and with contrapuntal contraposition of two elements: chromatic movement of semitones in the lowest register and the melodic fifth (A–E) interval in the high register flashing as a lightning (Example 3). The resolution of this contrast and conflict is tragic.

Example 3

At the end of the legend fifth is sounding like a broken string and there remains a sharp, painful minor second "H#–C#" (Example 4). It (second) reminds us as of the beginning of the First Legend. But its origin and character are different. In the First Legend the minor second – the first sounds of twelve-tone series and the impulse for further inrun. At the end of the Second Legend the minor second – simultaneously sounding both quintachord thirds form a tragic end. It seems the cycle has been closed.

Example 4
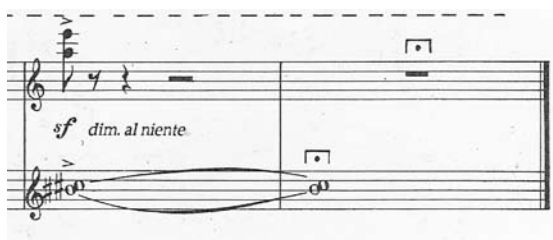
However, the **Third Legend** has combined the First and the Second Legends: twelve different sounds are ringing (they remind of the First Legend based on the twelve tone technique), and minor second "H#–C#" of the Second Legend takes resolution into minor third "B–Db" (Example 5).

Example 5
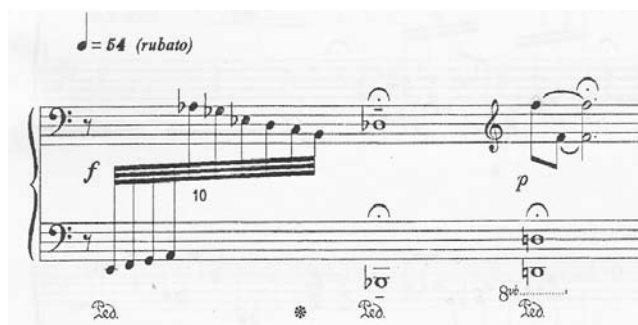
The finale of the Third Legend – D minor fifth diatonically filled – is the resolution of the earlier intensive chromatism. The last sounding melodic interval – the second "F–E" appears to be as if the response to the very beginning, i. e. to the first interval of the First Legend, as its resigned resolution (Example 6). Besides, the tonal relations of the Second Legend may be treated as the resolution of the dominant into tonic. Thus, the Third Legend has not only united the first two, but also has obviously completed the cycle.

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Example 6

Beginnings and finales of all the three legends – interval and high-rise-tonal – have not only united all the three legends, but also have given dynamics and intensity for all the cycle.

The duration of the cycle "Three Legends about Čiurlionis" is 17–18 minutes, what is not typical of the traditional trilogy, but when listening to the works they do not seem to be small, because in a short time a lot has been told and a large range of sounding and psychological variety has been revealed.

The second trilogy by V. Barkauskas (Concert for Viola and Chamber Orchestra, 1981, op. 63, Sextet for two violins, viola, cello, doublebass and piano, 1985, op. 78, the Fifth Symphony for big Orchestra, 1986, op. 81) is like a hidden cycle, i. e. it has no outward features of a traditional cycle – no uniting title, no genre community, no similar instrumental cast.

These three works were written in the ninth decade of the 20th century, and in all of them the author's reflection of the last soviet decade is clearly felt. It is noted in the author's works annotations:

> "The idea of the Concert for Viola would reflect both our (Barkauskas' and the soloist's Yuri Bashmet's) thinking and our intention: a person, an artist, with spiritual values on the one side, and an oppressive environment and daily routine on the othe"[4].

> "Music of the Sextet is imbued with expression, contrasts, reflection of collisions of human life in its full tragedy and beauty"[5].

The Fifth Symphony is the author's reaction to one of the greatest human tragedies of the 20th century – Chernobyl atomic catastrophe. "At the time Soviet demagogy was especially obvious. Tragedy and feast in time of the plague", – it wrote the composer in 2005[6].

Thus, one can feel the idea dynamism – from subjective chamber to objective symphonic expression. Sextet is in an intermediate position: it is subjective and chamber from the point of view of the idea and cast, but its inner intensity is more close to the Symphony.

All parts of the second trilogy have the same concept that could have been called "*Per Aspera ad Astra*". But "*astra*" – is not a traditional celebratory end, but only allusion to brightening, only a hint of light with resignation shade. It is reflected in analogical finales having the function of a coda. Intensive events full of conflict are followed (*attacca*) by a catharsis coda. Its compositional structure is similar: organ-choral layout of string instruments that increases cathartic nobleness; in a change of homonymous major-minor there is an ostinato repetition of not finished thematic phrase and at the ends of all works there is "*al niente*".

These three finales express the same catharsis in a different way, e. g. in the finale of the Concerto for Alto there dominates the atmosphere of statics and stagnation. The soloist is as if far from the orchestra, indifferent and communicates only with the harpsichord. A typical major-minor third is sounding from time to time according indifference and some kind temporality of the atmosphere The finale of the Sextet is more intimate, warm and painful. Synchronous sounding of the major and minor tertia dominates in different voices and different registers. On the one hand, it is a dissonance, painful and hidden, on the other hand, the minor part of the piano set in Albertic texture is as if calming and comforting.

The Fifth Symphony finale is the brightest in the trilogy, e. g. in the Concerto for Alto, the last sounds of the theme phrase ostinato repeated have got a minor tone (Example 7), and in the Fifth Symphony – a major tone (Example 8). In the Fifth Symphony, coda ostinato themes are taken by two soloists: the alto – in its lowest register and the violin – in its highest one. From the point of view of harmony the repeated violin phrase is subdominant and of Lydian mode, giving more light (Example 8). And the most important – there is no swinging between two thirds, and the minor colour disappears. The C-major chord of the widest diapason is sounding *pianissimo*, and the "D" sound repeated by the harpsichord is gradually disappearing (Example 9).

Example 7

Example 8

Example 9

All the works of the trilogy are united by intonation, thematic, timbre, tune-harmonic rela-tions. The fifth interval is the most important in all three opuses (as an independent interval – intonation and also as the diapason of the thematic material), e. g. resemblance is felt in ostinato themes of the finales of the Concerto for Alto and in the Fifth Symphony: both themes consist of seven sounds and in both themes one feels major-minor swinging (Example 7 and Example 8). Secondary themes of the finales of the Sextet and of the Fifth Symphony are made up of the same sounds – fifth from "F" to "C" gradually filled, but in different registers and in different rhythm (Example 8 and Example 10).

Example 10

It is obvious that writing the Symphony (especially its finale) the composer remembered also the Alto Concerto and the Sextet, because in the finale of the Symphony the material of both the works had been united.

The main harmonic base points in the Alto Concerto and in the Sextet are "A" and "C". In the finale of the Symphony the distinctive "C" is dominating and at the end – C major. All the three works are united by homonymous major-minor used in many-sided ways.

In the trilogy one can feel the composer's love for alto and its timbre. A rather important part is played by piano and harpsichord.

Though there are no formal outward features of the cycle, the Concerto for Alto, Sextet and the Fifth Symphony are united by the common concept reflected in the finales of all the works. This is the most important argument for the presence of the cycle phenomenon.

Why did the author create three analogical finales? It is obvious that reflection of the past period seeking for the light, though seeking for illusory light, had overwhelmed the composer's thinking and it was not enough for the author to have one work with such finale concept. Thus, creative impulses "defeat" one work framework and inspire the formation of a hidden cycle.

Two Vytautas Barkauskas' trilogies – two different principles of cycle structuring. In the first V. Barkauskas' trilogy the idea realization reminds of the variation principle – every legend is a variation of the same theme (about Čiurlionis). Dynamics of the cycle is expressed by various high tonal relations. In the second trilogy one can feel the idea dynamism – from subjective chamber to objective symphonic expression. The finals of both the trilogies are different: one can feel the impression of generalization and completeness of the "Third Legend" and catharsis, hope and at the same time the impression of incompletion in the fifth symphony final. Thematic, tonic, harmonious relations in legends are so called "chainy", in the second cycle – rondo and of reminiscence ("arch") manner.

Though both the cycles have been created without preconceived decision to develop the same idea, in the first case the author in his creative work was consciously moving towards the cycle. In the second case only after he had written the finale of the Symphony he understood that the Concerto for Alto, Sextet and the Fifth Symphony had been connected.

The author himself is not very keen how to name such cycles – a trilogy or not. The most important thing is that these cycles consist of independent and at the same time of very closely related work.

References

[1] Some V. Barkauskas' cycles are mentioned in an analysis textbook: "Muzikos kūrinių analizės pagrindai". Vilnius: Vaga, 1977, pp. 437–438. The cycle "Three Concert Etudes" for the piano, op. 62 and the poliphonic cycle "Zodiacus" for organ, op. 59 were analysed in diploma work: A. Bajarūnaitė. "Vytauto Barkausko kūrybinio proceso ypatumai". Vilnius: Lietuvos valstybinė konservatorija, 1982, pp. 32–55, 73–83.

[2] Under the title "Legend about Čiurlionis" but not "The First Legend... " this opus was published in: "Concert Pieces by Soviet Composers for Piano". Leipzig: Edition Peters, Nr. 5738, pp. 75–80 or "V. Barkauskas. Legenda apie Čiurlionį". Vilnius: Vaga, 1973.

[3] From a talk with the composer on 26 March in 2004.

[4] Viola Music Week. Vilnius: National Philharmonic, 2001, p. 8.

[5] 9th Contemporary Music Festival "Gaida". Vilnius: Lithuanian Composers' Union, 1999, p. 19.

[6] National Philharmonic Society of Lithuania. Vilnius: NPh, January–May 2006, p. 55.

Santrauka

Dvi Vytauto Barkausko trilogijos – du skirtingi ciklo sudarymo principai

V. Barkausko kūryba pasižymi didele ciklinės formos įvairove: nuo aliuzijos į barokinę siuitą soliniam instrumentui iki stambių instrumentinių ciklų – trilogijų. Straipsnyje nagrinėjami du ciklai, kurie susiformavo be išankstinio autoriaus nusiteikimo plėtoti tą pačią idėją. Viena V. Barkausko trilogija yra žinoma kaip „Trys legendos apie Čiurlionį" fortepijonui. Gyvenimo cikliškumas ir ypač tarptautiniai M. K. Čiurlionio pianistų ir vargonininkų konkursai natūraliai sąlygojo šio ciklo atsiradimą. To paties žanro ir tos pačios instrumentinės sudėties kūriniai buvo parašyti dideliais laiko tarpais ir pažymėti kaip atskiri opusai: I legenda – 1972, op. 30, po 16 metų (1988) – II legenda, op. 87, dar po 5 metų (1993) – III legenda, op. 102.

V. Barkausko muzikinio mąstymo, jo kompozicinės technikos ir stiliaus evoliucija per 20 metų (1972–1993) atsispindėjo ir šio ciklo dalyse. Todėl nuostabą dar labiau kelia tai, kad, nepaisant stilistinių, muzikinės kalbos skirtumų ir dramaturginio kiekvienos dalies savarankiškumo, pavyko išlaikyti visų trijų legendų apie Čiurlionį idėjos bendrumą. Be dalis jungiančių ryšių, tokių kaip kontrastinė dramaturgija, judėjimo dinamika, daugiasluoksnė polifoninė erdvė, semantiniai-simboliniai ir intonaciniai-intervaliniai bendrumai, egzistuoja labai ryškios jungtys pereinant iš vienos legendos į kitą. Pastarųjų analizė ir kai kurios „Trijų legendų apie Čiurlionį" kūrybinio proceso detalės leidžia teigti „grandininio" pobūdžio ryšio buvimą analizuojamame cikle.

Faktoriai, leidžiantys traktuoti ciklą „Trys legendos apie Čiurlionį" kaip trilogiją: kiekvienos legendos savarankiškumas, koncentruotas minties talpumas, didelis erdvės ir laiko intensyvumas. Lyginant šį ciklą su „Trimis koncertiniais etiudais" fortepijonui (1981, op. 62), ciklų skirtumas akivaizdus.

Kitą V. Barkausko trilogiją sudaro skirtingų žanrų ir skirtingos instrumentinės sudėties kūriniai: Koncertas altui ir kameriniam orkestrui (1981, op. 63), Sekstetas (1985, op. 78), V simfonija (1986, op. 81). Juos jungia bendra idėja, bendra dramaturgijos plėtojimo logika, kai kurie formos struktūros ypatumai, analogiški visų trijų kūrinių finalai, intonaciniai-harmoniniai, tembriniai-instrumentiniai ryšiai.

Pirmoje V. Barkausko trilogijoje idėjos realizacija sąlygiškai primena variacijų principą: kiekviena legenda – tai savotiška tos pačios temos (apie Čiurlionį) variacija. Jungiamieji tonalūs aukščio santykiai suteikia viso ciklo eigai dinamikos. Antroje trilogijoje juntamas dinamiškumas – nuo subjektyvios kamerinės iki objektyvesnės simfoninės išraiškos. Skirtingi abiejų trilogijų finalai: apibendrinimas ir kartu ciklo uždarumas/užbaigtumas (III legenda) bei katarsio, prašviesėjimo, vilties ir kartu neužbaigtumo įspūdis (V simfonijos finalas). Teminiai, intonaciniai, harmoniniai ryšiai legendose „grandininiai", antrame cikle – rondiniai ir arkos pobūdžio.

Pagrindiniai trilogijų žanro ir ciklo bruožai išliko. Tačiau ryški XX a. antrosios pusės kameriškumo tendencija ir trauka prie glaustos minties išraiškos palietė ir V. Barkausko kūrybą, savitai pasireiškė jo trilogijose.

Tuukka Ilomäki

Interval Cycles and Twelve-tone Rows with an Application to the Analysis of Alban Berg's *Lyric Suite*

1. Interval cycles

The role of interval cycles in the music of early 20th century composers is widely recognized. In addition to the analytical observations on the compositions, we have the sketches and the theoretical writings of the composers themselves at our disposal.

The array of interval cycles in Example 1 is particularly interesting. It is an extract from Alban Berg's letter to Arnold Schoenberg, dated July 27th, 1920 (Perle, 1977a). Berg calls this array a "theoretical trifle", but we can see more to it. Dave Headlam (1996) has shown in great detail the

Example 1. Alban Berg's array of interval cycles.

persistence of interval cycles in the music of Alban Berg. Hence, Berg's array of interval cycles, far from being a mere trifle, reflects a significant and continual feature of his musical language, from the second song of his Opus 2 (*Schlafend trägt man mich in mein Heimatland*), which still employs a key signature, through his last work, the twelve-tone opera *Lulu*.

Examples 2 and 3 provide an example of what we call persistence of interval cycles. Example 2 shows the main theme of Alban Berg's *Lyric Suite*. It contains cycles of fifths in a disguised form: taking every second note gives us the cycles *F–C–G*, *E–A–D*, *Ab–Eb–Bb*, and *Db–Gb–B*. The passage in Example 3 is a variant of the main theme, in which the theme is transformed into an explicit cycle of fifths.

Example 2. Main theme of the first movement of Alban Berg's *Lyric Suite* (violin I, measures 2–4).

Example 3. A variant of the main theme of the first movement of the *Lyric Suite* (violoncello and violin I, measures 64–66).

2. Twelve-tone tonality: cyclic set

George Perle (1977b) builds a theory on the interval cycles which he terms *twelve-tone tonality*. We can only scratch the surface of the theory here, picking some elements relevant to our discourse.

Our starting point is the basic concept of Perle's theory: the concept of a *cyclic set*. We begin with an interval cycle – a sequence of pitch classes in which the (ordered) pitch-class interval between adjacent pitch classes is constant. For instance, the two upper rows in Example 4 depict two cycles in which the pitch-class intervals are *7* and *5*, respectively. Both cycles begin with pitch class *0* and the remaining pitch classes are obtained by adding *5* or *7* modulo *12*.[1] (Incidentally, both cycles are from Berg's array.) In order to create a *cyclic set*, we intertwine two interval cycles with complementary pitch-class intervals, such as *5* and *7*. For instance, by intertwining the two interval cycles of Example 4, we obtain the cyclic set that is shown in the bottom line.

An essential feature of cyclic sets is the alternating sums of adjacent pitch-classes modulo *12*. This follows directly from the construction of cyclic sets. For instance, in Example 5 the sums alternate between *0* and *7*.

Example 4. A cyclic set obtained by intertwining two interval cycles.

Example 5. Alternating sums (modulo 12) of a cyclic set.

My critique of Perle's presentation of his theory is the concept of sum. Namely, we can argue that pitch classes do not have group structure (or any other algebraic structure for that matter). The notion of "sums of pitch classes", therefore, is ill-advised. Example 5 seems plausible, since it is written with numeric notation. If we were to write it with conventional note names it simply would not make sense. Does $D\# + A\#$ equal $C\#$?

Nevertheless, if the "sum" of pitch classes a and b equals n, it means that inversion I_n maps these two pitch classes into each other. Consequently, since the sums of the adjacent dyads of the cyclic set in Example 5 are 0 and 7, it means that the dyads are invariant under inversions I_0 and I_7, as demonstrated in Example 6. Hence, we can replace the concept of sum with that of inversion. In addition, our aim is to apply the theory to the realm of twelve-tone rows and we are accustomed to discussing twelve-tone theory in terms of inversions, not in terms of sums.

Example 6. Invariant dyads of a cyclic set.
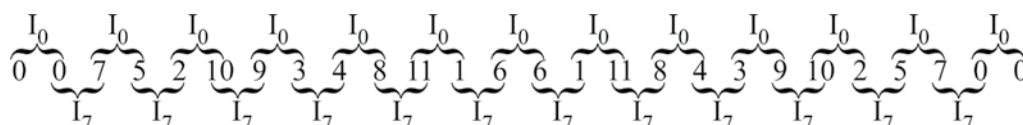
3. Cyclic rows

A cyclic set is not a twelve-tone row and *vice versa*. Nevertheless, cyclic sets and twelve-tone rows are related concepts, since they are both ordered sequences of pitch classes. We can learn something about twelve-tone rows by examining cyclic sets.

There are two major differences between cyclic sets and twelve-tone rows. First, cyclic sets do not necessarily contain all twelve distinct pitch classes. Second, pitch classes may be duplicated in a cyclic set but not in a twelve-tone row. Indeed, the cyclic set in Example 4 begins with a duplication of pitch class *0*. Nevertheless, in certain cases we can extract a segment of twelve distinct pitch classes from a cyclic set and interpret this segment as a twelve-tone row. Example 7 displays two cyclic rows in a cyclic set.

Example 7. Cyclic rows: segments of a cyclic set with 12 distinct pitch classes.
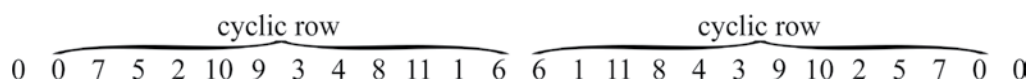
Our preliminary definition of a cyclic row is *a segment of a cyclic set that contains all the twelve distinct pitch classes*. In such cases we can apply the theory of cyclic sets to analyze the properties of cyclic rows.

Many of a cyclic set's properties depend on the cyclic interval. For our purposes, the crucial issue is whether a cyclic set contains all twelve pitch classes. We can formally prove that if the two intertwined interval cycles are ic1-cycles or ic5-cycles, then the cyclic set will always contain all the twelve pitch classes. In addition, if the two intertwined interval cycles are two disjoint ic2-cycles – that is, the two disjoint whole-tone scales – then the cyclic set will also contain all twelve pitch classes. In all other cases, the cyclic set contains less than twelve distinct pitch classes, and such cyclic sets cannot contain any cyclic rows.

We noted earlier that the dyads in Example 5 are invariant under inversions. It so happens that we can define cyclic rows entirely in terms of inversions and we do not need to make any reference to cyclic sets.

Before discussing the details, we should pause for a moment to ask why we should be interested in this phenomenon in the first place. The answer is invariance – a well established means in the art of twelve-tone composition. In short, a composer can bring variety to his piece by employing different musical materials and coherence, through preserving and perhaps even emphasizing invariant features in his materials. For example, in order to add variety, twelve-tone composers usually use several different twelve-tone rows in a composition, and for the purpose of coherence they select rows that are mutually related, often in several different ways.

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Let us consider the row of the first movement of Alban Berg's *Lyric Suite*. The row is labeled as *P* in Example 8 and below the row is its inversion I_9P. These rows are thus related by inversion. In addition, if we examine the dyads of the rows – marked with brackets – we notice that the dyads are the same, only reversed. Similarly, in Example 9, we again have row *P* and its inversion I_4P. If we inspect the dyads – again marked with brackets – we notice that the dyads are again the same. This time, five of the dyads are reversed and one is remains unaltered. These rows are thus related both by a transformation and by the dyads.

The invariant dyads are precisely the reason behind our interest in the cyclic rows. Namely, the alternating sums of cyclic sets translate directly into invariance under two inversions in twelve-tone rows. We can take two approaches to the dyads. A stronger approach is to require that all dyads are reversed, such as in Example 8. A weaker one is to require that only the dyads are invariant, as in Example 9.

Example 8. Row *P* of the first movement of Alban Berg's *Lyric Suite* and its inversion I_9P.

Example 9. Row *P* of the first movement of Alban Berg's *Lyric Suite* and its inversion I_4P.

With these preliminary observations we can now give the following definition for cyclic rows in terms of dyads and inversions.

A twelve-tone row is a cyclic row only if the two conditions hold.[2]

(1) The unordered dyads at order positions $\{0, 1\}$, $\{2, 3\}$, $\{4, 5\}$, $\{6, 7\}$, $\{8, 9\}$, and $\{10, 11\}$ are invariant under an odd inversion I_n and the unordered dyads at order positions $\{1, 2\}$, $\{3, 4\}$, $\{5, 6\}$, $\{7, 8\}$, $\{9, 10\}$, and $\{0, 11\}$ are invariant under inversion I_m.

(2) If *m* is even, then the two pitch classes that inversion I_m keeps fixed must be the first and last pitch classes of the row.

If only the first condition holds, a row is then semi-cyclic.

We can formally show that the preliminary definition of cyclic rows and the aforementioned definition are equivalent, but we will skip the details here.

We defined a stronger and weaker approach to the invariant dyads above. Cyclic rows satisfy the stronger approach to the dyads, semi-cyclic rows satisfy only the weaker approach. We will call rows with shared dyads *cognate rows*.[3]

The *Lyric Suite* row is a semi-cyclic row, but not a cyclic row, because it is not a segment of any cyclic set. This is illustrated in Example 10: even if the dyads are invariant in two inversions, the sums are not the same.

Example 10. *Lyric Suite* row *P* and its dyads and sums.
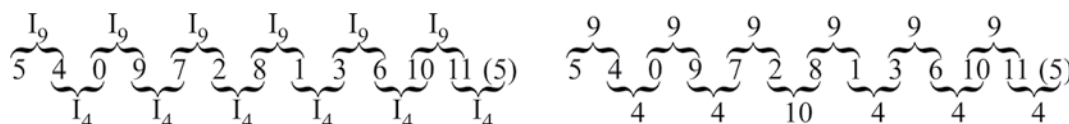
The pertinence of the phenomenon at hand is reflected in the multitude of approach methods that various authors have proposed. One of these is the family of row operations known as *alpha-operations*, introduced and formalized by Robert Morris (1982). While Morris introduced alpha-operations in terms of pitch classes, we can apply them to the order numbers as well in the spirit of Andrew Mead (1988). As a result of this, we also obtain a compositional practice already described by Ernst Křenek (1960).

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Example 11 illustrates alpha-operations as applied to the pitch classes. For example, in operation a_1 we exchange pitch classes *0* and *1*, pitch classes *2* and *3*, etc. Similarly, in operation a_2 we exchange pitch classes *1* and *2*, pitch classes *3* and *4*, etc. Correspondingly, Example 12 illustrates graphically alpha-operations applied to order numbers: we simply exchange adjacent pitch classes. In operation a_1 we exchange order numbers *0* and *1*, order numbers *2* and *3*, etc. Similarly, in operation a_2 we exchange order numbers classes *1* and *2*, order numbers *3* and *4*, etc.

Example 11. Operations α_1 and α_2 applied to pitch classes.
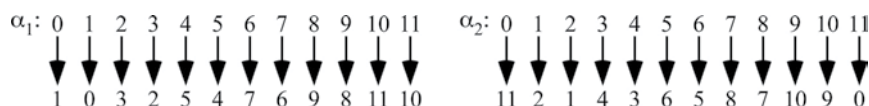
Example 12. Operations α_1 and α_2 applied to order numbers.
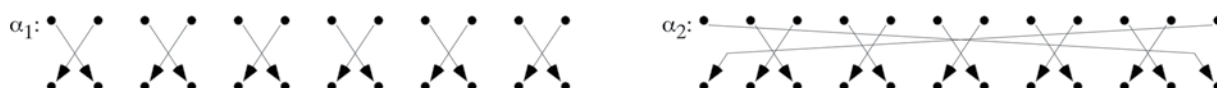
If we now return to Example 8, we notice that by applying order number operation a_1 to the upper row *P*, that is, exchanging the adjacent pitch classes of the upper row *P*, we obtain the lower row I_9P. Inverting the row or exchanging adjacent pitch classes, therefore, gives the same result.

Row *P* of the *Lyric Suite* is an exceptional twelve-tone row. Certainly, we do not always obtain an inversion when we exchange adjacent dyads in a row. Sometimes we may get another row form, however. Example 13 shows two rows from the third movement of the *Lyric Suite*, labeled as *Q* and RI_1Q. The row has none of the properties of cyclic rows. Nevertheless, by applying operation a_1 to the order numbers, we obtain retrograde inversion RI_1Q of the original row. In fact, by applying order-number operation a_1 to any row in the row class of row *Q*, we obtain another row in the row class. We call such row classes *alpha-invariant row classes*. The two rows in Example 13 thus provide another example of rows that are mutually related in several different ways: they belong to the same row class (a transformational relation) and they have identical unordered dyads (a shared property).

Example 13. Related row forms in the exposition (first violin, mm. 7–8) and recapitulation (first violin, mm. 45–46) of the first movement of the *Lyric Suite*.

4. Lyric Suite

Let us now apply these concepts to the analysis of the *Lyric Suite*. This is most appropriate, since George Perle uses the row from the first movement to demonstrate issues in his theory, and he cites the piece itself as its originator (Perle 1977a; 1977b).

We have already discussed the row forms of the first and third movements that are pertinent to the analysis; Example 14 recapitulates these row forms. Now we need to examine how they are used in the two movements.

Berg uses rows with shared dyads extensively in the first movement of the *Lyric Suite*. Throughout the piece cognate row forms are chained the way row forms *P* and I_4P are chained in Example 15. The first and last pitch classes are shared in consecutive row forms. In addition, the

(unordered) dyads in the middle (order numbers *1* to *10*) are always in the same order. In the two row forms the order of each dyad is inverted, except for the middle dyad − in the case of row forms *P* and I_4P these are pitch classes *2* and *8*.

Example 14. Row relations of the first and third movements of the *Lyric Suite*.

Example 15. Chaining row forms.
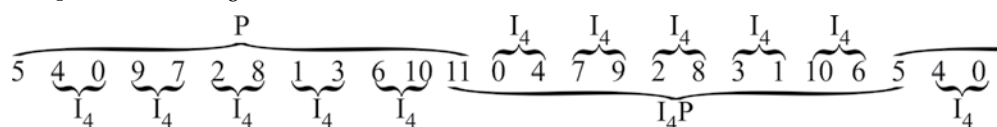
As a side note, we point out that the two cognate rows *P* and I_4P (and all corresponding row pairs) are not members of the same hexachord area, since row *P* contains hexachords {*0, 2, 4, 5, 7, 9*}/{*6, 8, 10, 11, 1, 3*} and row I_4P contains hexachords {*7, 9, 11, 0, 2, 4*}/{*1, 3, 5, 6, 8, 10*}. Hence, we can consider the cognate relation and hexachord areas as two alternative strategies, both aimed at providing continuity by association with adjacent but distinct row forms.

The first movement of the *Lyric Suite* is in sonata form (Headlam 1996, 250). While the piece is not tonal, some of the features of a tonal sonata form are imitated by the use of the cognate relation. The main theme in the exposition (mm. 2–12) and recapitulation (mm. 42–48) are easily identified. In both cases, the main theme begins with the same row form *P*. In the corresponding measures 7–12 in the exposition and 45–48 in the recapitulation, cognate row forms are used: mainly row form *P* is used in measures 7–12, whereas mainly its cognate counterpart I_4P is used in measures 45–48 (Example 17). Hence, we can interpret the cognate relation as one strategy to bring about coherence in order to compensate for the lack of tonal relations.

Example 16. Cognate rows in measures 7–8 and 45–46 of the first movement of the *Lyric Suite*.

Example 17. Use of rows in the main theme of the first movement of the *Lyric Suite*.

exposition			recapitulation		
measure	motive	rows	measure	motive	rows
2–4	*x*	*P*	42–44	*x*	*P*
5–6	*y*	*P*			
7–12	*x'*	*P*	45–48	*x'*	I_4P

As Examples 8 and 9 show, the row of the first movement of the *Lyric Suite* provides two possible dyad relations. It is curious that Berg never uses the perhaps more obvious cognate relation of rows P and I_9P – there is not a single appearance of row form I_9P in the first movement. The movement relies on the less obvious relation of row forms P and I_4P. For a music analyst this is puzzling: why "waste" such a magnificent row by not taking advantage of its extraordinary properties? (I believe we may safely rule out the possibility that Berg was not aware of this relation.)

The row of the third movement is not a cyclic row, or even a semi-cyclic row. Nevertheless, as Example 14 shows, the row class is invariant under order-number operation a_1. Consequently, row Q (that used in the opening of the piece) and row RI_1Q (that used in the closing of the piece) have precisely the same succession of unordered dyads.[4]

In the third movement, we also return with material sharing the dyads, since the row forms used in the recapitulation are retrograded. Hence, we have the retrograded dyads at order positions {0, 1}, {2, 3}, {4, 5}, {6, 7}, {8, 9}, and {10, 11} between row forms Q and RI_1Q, as described in Example 14. Thus, in both movements, the recapitulation utilizes a row form that has the same dyads as a row form in the exposition (Example 18).

Example 18. Row relations in first and third movements of the *Lyric Suite*.

	movement I	movement III
form	sonata	$A–B–A'$
dyads	P and I_4P	Q and RI_1Q

We noted above that of the two invariance relations between dyads, the more obvious one is never utilized in the first movement. We can interpret this as an imbalance that is fixed in the third movement when the relation between dyads at those order positions is used. This suggests a compositional and narrative strategy which could be put in Schoenbergian theoretical terms as a striving for balance from a state of imbalance.

In both the first and third movements the relation of the dyads is used to create long span connections. In the first movement the relation arises from the cyclic origin of the row; in the third movement Berg cleverly emulates the cyclic property with an alpha-invariant row class. Hence, the row relations stemming from the cyclic nature of the rows not only provide local continuity in the *Lyric Suite*, but they also play a structural role both in the first movement and in the third movement.

References

Babbitt, M. (1960). Twelve-Tone Invariants as Compositional Determinants. *The Musical Quarterly* 46(2), 246–259.

Headlam, D. (1996). *The Music of Alban Berg*. New Haven and London: Yale University Press.

Krenek, E. (1960). Extents and Limits of Serial Techniques. *The Musical Quarterly* 46(2), 210–232.

Mead, A. (1988). Some Implications of the Pitch Class/Order Number Isomorphism Inherent in Twelve-Tone System: Part One. *Perspectives of New Music* 26(2), 96–163.

Morris, R. (1982). Set Groups, Complementation, and Mappings Among Pitch-Class Sets. *Journal of Music Theory* 26(1), 101–144.

Perle, G. (1977a). Berg's Master Array of the Interval Cycles. *The Musical Quarterly* 63(1), 1–30.

Perle, G. (1977b). *Twelve-Tone Tonality*. Berkeley: University of California Press.

Notes

[1] I use a flavor of numeric notation known as fixed-zero notation in this paper: *0* denotes *C*, *1* denotes *C#* or *Db*, etc. In addition, I use numeric notation for the order numbers (Babbitt 1960).

[2] I adopt Andrew Mead's convention of writing order numbers and order-number operations in bold (Mead 1988).

[3] Compare to Perle (1977, 22).

[4] Incidentally, this invariance feature would allow dividing both rows into intertwined (ordered) hexachords *A50183* and *9B7624*, which is a rare property; this device is not used in this movement, however.

Santrauka

Intervalinių ciklų ir serijų taikymas analizuojant Albano Bergo „Lyrinę siuitą"

G. Perle'io dvylikatonės tonacijos teorija, kurios pagrindas yra ciklai, randami A. Bergo ir kitų XX a. kompozitorių muzikoje, pagal priimtą šių terminų vartojimo prasmę nėra nei dvylikatonė, nei tonali. Nepaisant to, kiek pakoreguoti, šios teorijos elementai yra aktualūs, tyrinėjant serijų šeimas. Perle'io teorijos esmė yra ciklinių setų – dviejų susipynusių intervalinių ciklų su papildomais garso aukščio klasės intervalais sekos – koncepcija. Pvz., cikliniame sete 012B496785A3 yra du susipynę pilnų tonų garsaeiliai. Arba, kitaip sakant, ciklinį setą charakterizuoja dvi kintamos sumos. Pastarajame pavyzdyje kintamos sumos yra 1 ir 3.

Šiame pranešime pirmiausia apibūdinamos ciklinių ir pusiau ciklinių serijų sąvokos, o po to apibrėžiami šiuo būdu susiję serijų šeimų setai, turintys kompoziciškai sugestyvių savybių. Vietoj Perle'io sumų ir skirtumų mes pritaikome šią teoriją serijoms, transpoziciškai ir inversiškai pakeisdami atitinkamas struktūras, susiejame šias struktūras su serijų formų, dar vadinamų *alfa* formomis, kurias apibrėžė ir tyrinėjo R. Morrisas, šeima. Analitiškai taikant naujai interpretuotą Perle'io teoriją, nagrinėjamos serijų struktūros pirmoje ir trečioje A. Bergo „Lyrinės siuitos" dalyse. Aptarus ciklinę serijų kilmę, jos siejamos pagal serijų šeimas, parodant ryšius tarp serijų formų, kurios suteikia ir vietinės reikšmės tęstinumo, ir, veikdamos kaip jungtys, sustiprina ilgalaikius ryšius tarp kūrinio dalių. Šis Perle'io teorijų pritaikymas Bergo muzikai yra tartum ciklo pabaiga, nes būtent „Lyrinė siuita" ketvirtojo dešimtmečio pabaigoje davė Perle'iui akstiną pradėti plėtoti jo teoriją.

<div align="right">Rytis Mažulis</div>

Structural Cycles in My Microtonal Compositions

On the question of structural cycle

While composing I usually search for some structural reason, a rule, according to which the musical material may be arranged in structural order, creating some kind of a structural cycle. I should say that the process of composition for me is rather a creation of 'Rule', instead of just writing notes and successions of notes, or chords. To create an 'order of creation', a principle that ensures the arrangement of different musical parameters, is a problem which I generally solve in my task of composing. After a structural rule is discovered, the formal decision of composition may suddenly come in one moment. Nevertheless it sometimes takes an enormously long time to discover.

Some features are constantly used by me as 'structural rules'. Cycles of the repetition of musical segments (*Twittering Machine*, 1984–1986), perpetual or spiral canon models (*Sybilla*, 1996), and permutation cycles can be mentioned (the latter will be discussed below). In my recent decade works I was especially interested in microstructural composition, just taking into account two musical parameters, i.e. pitches and rhythm. In the field of pitches my approach to intervals smaller than a semitone is based on an equidistant division (see below the analysis of *Form is Emptiness*). Analogically, extraordinary short durations attracted me together with microrhythmical and polytemporal constructions that sometimes emerge.

In general, typical technical means of my composition are cycles of proportional or mensural canons. The ideas of symmetry and infinity in musical form may be developed, searching for palindromic structures, or structures based on fractal symmetry and selfsimilarity (*Cum essem parvulus*, 2001 and *Ex una voce*, 2004).

The idea of the subdivision of the octave into 360 segments

Some series of my works were written in the period 1999–2006 exploiting the subdivision of a tempered semitone, or an octave into some numbers of equal parts. In *Talita Cumi*, the sound installation for voices and electronics (1999), a tempered semitone is divided into especially small segments, spacing 30 notes inside it (consequentially the size of each microinterval is around 3.33 cents). The musical process in *Talita Cumi* is limited within an extremely narrow space: rows of microtones are built inside of three semitones (F-F♯, G♯-A, and B-C).

Making a review of my vocal music, a Polish musicologist Jan Topolski gives the idea of extending the microtonal scale into a range of an octave (Kultūros barai, 10/2005). Thus, there may be 360 different sounds within the octave (30 sounds within each of 12 semitones). Probably I was just pushed by Topolski to create a musical system with 360 sounds in an octave in my recent composition *Form is Emptiness* (2006) for 12 voices, cello and electronics. All the pitches written down in succession give an impression of an extremely long microtonal scale, ascending from C to C♯, D, D♯, E etc. (Example 1; the numbers above the notes indicate that the series of notes are higher in 10.0; 13.3; 16.6 cents etc.). A notable feature of the scale is that every sound is *different* from another, therefore we have a succession of 360 *different* unrepeated pitches.

The idea of permutations

In such works as *Talita Cumi*, *Canon mensurabilis* (2000) for six instruments, *Musica falsa* (2006) for four bassoons and electronics I have used the technique of permutations, as the arrangement of elements in a row (=a set) of microtones. This serial procedure is made according to Messiaen's interversion technique: the order of succession of sounds in the row is changed, and new constellations of the same row apear. In *Form is Emptiness*, using Messiaen-like interversions, the row is presented in "en éventail ouvert, du centre aux extrêmes" (from centre sideways).

There is a difference between a permutation technique used in my previous works from those in *Form is Emptiness*. The question is, if a single note or either a *group* of neighbouring sounds from the row will be considered as a structural element (=unit) to be affected by permutations.

Example 1

In *Form is Emptiness* the system of pitches comprises 360 notes, and the row is very long. That's why I decided to consider the elements of the row as *groups* composed of a different amount of notes. A simple rule of the multiplication of notes is adopted, and the elements are: 1st note; 2nd and 3rd notes (2); 4th, 5th and 6th notes (3) etc. We may add one more note to each new group, and finally there is the longest group, consisting of 19 notes. After that the groups are gradually shortened: 18; 17; 16; 15 ... ... 3; 2. As a result, there are totally 36 elements in the row.

The permutation in *Form is Emptiness* was executed without a mathematical severity. I just made a sketch on a page with the microtonal 360-sounds-row (Example 2). Rather there is a pass from the centre of the page to the margins, jumping from one stave to another, choosing groups of notes in succession, or sometimes in a broken order (the arrows show the way to pass from the preceding group to the next one, etc.). Everything seems to be done in a spontaneous and intuitive way, and that's why the moment of composing this stuff was so curious for me. Finally, the result is a present of the same aggregate of 360 sounds, without repetition of any sound (every sound appears only once during the whole piece). The scheme of permutation is as follows:

151 (1) − *122-123* (2) − *184-186* (3) − *97-100* (4) − *221-225* (5) − *76-81* (6) − *262-268* (7) − *59-60*; *31-36* (8) − *277-285* (9) − *16-25* (10) − *326-330*; *301-306* (11) − *337-348* (12) − *169-180*; *152* (13) − *121-136* (14) − *197-210*; *181* (15) − *92-96*; *101-111* (16) − *232-240*; *211-218* (17) − *69-75*; *82-90*; *61-62* (18) − *243-261* (19) − *52-60*; *37-47* (18) − *288-300*; *271-274* (17) − *5-15*; *26-30* (16) − *331-336*; *349-357* (15) − *153-166* (14) − *137-149* (13) − *182-183*; *187-196* (12) − *112-120*; *91*; *219* (11) − *220*; *226-231*; *241-242*; *269* (10) − *63-68*; *48-50* (9) − *270*; *275-276*; *286-287*; *307-309* (8) − *51*; *1-4*; *310-311* (7) − *358-360*; *150*; *167*; *219* (6) − *312-316* (5) − *318-320* (4) − *321-323* (3) − *324-325* (2).

Rotation of the prime form of the row

The resultant constellation of 360 sounds is presented in the work as the basic (= prime) form of a structural row (Example 3). In order to get six forms (according to the required arrangement for a chamber vocal group, with six female and six male voices) I accomplished the *rotation* of elements within the row: the first prime-form consist of 36 elements in succession, but the 1st rotation (R^1) results starting with 2nd element, while the first one goes to the very end of the row. The 2nd rotation (R^2) has 3rd element for the beginning, and 1st and 2nd elements go to the end; consequentially the 3rd rotation (R^3) and 4th to 5th (R^4 and R^5) are derived under the same order. The following scheme appears:

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36   Prime
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 1   R¹
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 1 2   R²
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 1 2 3   R³
5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 1 2 3 4   R⁴
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 1 2 3 4 5   R⁵
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Canon construction process

The polyphonic presentation of six structural 'lines' in six vocal parts results as a six-part canon. The 'prime' form appears in the upper part, while the rotation forms in the rest parts (2–6). Starting together at the same time, six voices are in constantly changing textural relationships. The scheme above demonstrates a gradual shifting of segments from a vertical to a diagonal position. The simultaneous overlapping of different segments in six parts composes a very special harmony, and it is difficult to explain the quality of 'chords' in structural terms. On the one hand, the harmonical shape of the music may be considered as a logical consequence of the linear presentation of microtonal rows (actually the same notes and groups of notes appear in different parts, and we may follow the vertical situation in the score; see Example 4). On the other hand, a vertical aspect of music is not under control of the composer: the process is totally based on a canonic structure, and the harmony is rather a random result of a linear development. The physical phenomena resulting from the mixture of different pitches, as the fusion of harmonics, heterodyning of microtonal pitch spectra etc. were unexpected for me while listening to the sound first. Though, I could not succeed in controling the acoustical parameters of sound, nevertheless just these aspects should be considered as the essential features of a harmonic language of the work.

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Example 2

Example 3

PART 1

The Heart Sutra

Form is Emptiness

Rytis Mazulis

Example 3 (continued)

Example 4

Rhythm and literary text

The piece is rather a study of micro-intonation of pitches, but not of precise rhythm or tempos. There is no strict synchronization in time between 12 vocal parts and cello part. Every performer has an individual *'pilot track'* (made as MIDI-sequence) with an exact intonation of notes that should be performed. Thus 13 CD players (or multichannel sound system) should be used for performance, to ensure the possibility of live-performance of the piece.

The well-known quotation from The Sutra Prajnaparamita was used as a literary text in the composition: "Form is emptiness and the very emptiness is form; emptiness does not differ from form, form does not differ from emptiness, whatever is emptiness, that is form, the same is true of feelings, perceptions, impulses, and consciousness". The words are divided into syllables, and each syllable is fixed to every individual note. To achieve 360 syllables (as well as notes), very simple calculations allowed to find out some phrases of the text to be repeated for several times.

Conclusion: spontaneity in a creation process

Structural methods of composing do not eliminate intuition and spontaneity. I always need some emotional tension during certain moments of my creative work. Finding the right solution to structural arrangement in composition may be compared with the status of 'enlightenment' that usually comes after a long period of searches and endeavour.

References

Daunoravičienė G. *Sound architecture of Rytis Mažulis' microstructural canons (from 100 to the 3,448275862 cents)*, Menotyra, Vilnius, 2003, No 1, p. 57–68.
Topolski J. *Talita cumi, Cum essem parvulus*, Kultūros barai, Vilnius, 2005, No 2, p. 40.

Santrauka

Struktūriniai ciklai mano mikrotoninėse kompozicijose

Esminė mano komponavimo problema – struktūrinio principo, cikliškai organizuojančio medžiagą, paieška ir sukūrimas. Dažniausiai naudojami segmentų pasikartojimo ciklai, permutaciniai ciklai, spiralinio kanono modeliai (*Canon mensurabilis, Talita cumi, Forma yra tuštuma, Sybilla*). Specifiniai mikrotoninės kompozicijos aspektai (struktūra – realizacija – percepcija), eksploatuojant ekvidistancines garso aukščio sistemas. Mikroritminių konstrukcijų tipai: menzūriniai politempų ciklai (*Cum essem parvulus*). Mastelio simetrija ir savipanašumas skirtingų parametrų sąveikoje, kūrinio – palindromo idėja. Kompozicijos *Forma yra tuštuma* (2006) analizė: 360 garsų ekspozicija oktavos apimtyje; serijos išskleidimas per interversijas „iš centro – į kraštus"; segmentų multiplikavimas nuo 1 garso iki grupių po 18 garsų; kanono konstravimas, rotacijos būdu dėliojant serijos formas 6 struktūrinėse linijose. Kūrinio harmonijos vaizdo prognozavimas ir atsitiktinumas (mikrotoninių spektrų samplaikos). Spontaniškumo nuojauta kūrybos procese (budizmo idėjų paralelės – kūryba kaip „nušvitimas") ir mikrotoninio komponavimo „romantika".

Autoriai / Authors

Svetlana Barkauskas. Born 1961, musicologist, Dr. of Humanities (musicology). After graduating from the Conservatoire of Odessa in 1984, did the internship (from 1986). Researcher at the Institute of Art, Folklore and Ethnography of the Ukrainian Academy of Science (since 1988). Investigated the cultures of minorities in Ukraine, defended the thesis "Culture of Czech Diaspora in Ukraine". The author of articles on the musical cultures of various ethnic minorities, the methodology and the methods of their musical folklore research. Living in Lithuania since 1992, has been researching and writing on Vytautas Barkauskas' works.

Kostas Chardas was born in Athens in 1970. He obtained his diploma in accordion in 1985 and diplomas in advanced harmony, counterpoint, fugue, orchestration and piano by the Athinaikon Conservatoire until 1994. He also studied musicology at the Aristotle University of Thessaloniki. Thereafter he studied in UK supported by a scholarship from the Greek Academy. In 1996 he was awarded the Postgraduate Certificate (Trinity College of Music, London), in 1997 the Master in Performance and Related Studies (University of London) and in September 2006 the Doctorate of Philosophy (University of Surrey, supervisors: Prof. Sebastian Forbes, Dr. Chris Mark). His thesis is on the piano music of the Greek composer Yannis A. Papaioannou combining issues of close analytical approach (post-Schenkerian approaches, pc theory, etc) with wider cultural issues, such as the advent of musical modernism in post-1950 Greece, and aesthetic issues, such as the notion of organicism.

In addition to his research interests, Kostas works as a solo and ensemble pianist. In the past few years he has given concerts in UK, Greece and Czech Republic. He also was the co-founder of the group Polyeco, organizing concerts with focus on the Greek and twentieth-century music. Future engagements include the critical edition of Papaioannou's piano music for Philippos Nakas The Music House and a recital for cello and piano entitled 'Humour and Melancholy in the Music of the Twentieth Century'.

Ryszard Daniel Golianek. 1963 – born in Ukta (Poland). 1983–1988 – studies: musicology (Adam Mickiewicz University, Poznań). 1984–1989 – studies: cello (Musical Academy, Poznań). From 1987 – post at Department of Musicology of Adam Mickiewicz University, Poznań, now professor. 1993 – Ph.D. (*Dramaturgy of Dmitri Shostakovich's String Quartets,* published in Polish 1995). From 1999 – post at Musical Academy in Łódź, now assisting professor. 2000 – habilitation (*Programme Music of the 19th Century. Idea and Interpretation,* published in Polish 1998). 1999–2005 – research project on Juliusz Zarębski's biography and work (publications: catalogue of his works in Polish and English, 2002; monograph on his life and work: *Juliusz Zarębski. Człowiek i dzieło,* 2004; two volumes on newly found his works, 2005).

Tuukka Ilomäki studied piano performance at the Helsinki Conservatory and received the degree of music teacher in 1994. He studied music theory and composition at the Sibelius Academy and received the degree of Master of Music in 2001. He also studied mathematics, philosophy and computer science at the University of Helsinki and received the degree of Master of Philosophy in 2002. He began his doctoral studies at the Sibelius Academy in 2002. During the academic years 2004–2005 and 2005–2006 he studied at the Eastman School of Music under the auspices of the Fulbright program. His research interests include 20th century music, twelve-tone music, similarity, and transformational theory. Currently he works as a researcher at the Sibelius Academy and is preparing his doctoral dissertation on the similarity relations of twelve-tone rows.

Rimantas Janeliauskas, Dr. Mus., a Lithuanian composer, pianist and pedagogue. Born 1947 in Kaunas. Studied at the Kaunas Secondary School of Art (1962–1966), piano with Prof. J. Karnavičius (1966–1973) and composition with Prof. J. Juzeliūnas (1973–1978) at the Lithuanian State Conservatory. Furthered his training at the department of composition (1979–1980). In 1983 submitted the theses "Aspects of Functional Dynamics in the Works of Contemporary Lithuanian Composers" and was awarded a doctor's degree. In 1989 arranged a concert of his works. Currently, R. Janeliauskas holds the position of associate professor at the Department of Composition at the Lithuanian Academy of Music and Theatre, lectures on musical theory and composition.

The composer's theoretical interests are focused on systematics of the principles of composing. Has organized six international music theory conferences, edited and issued the publications "Principles of Music Composing", Vol. I–VI (2000, 2002, 2003, 2004, 2005, 2006) and series of research papers on the cycles of Čiurlionis' music in Lithuanian and English.

Among his best works are: symphony, quartet, triptych, sonata for piano, sonata for violin and piano and other works.

Margarita Katunyan, Doctor of Musicology, professor at the Moscow Conservatoire/University/, has to her credit more than 180 articles on the most varying subjects: a history of composition, history and practices of *basso continuo*, history of music forms, modern harmony, traditional and modern types of notation, ethnomusic and modern compositions, electronic music, works of contemporary composers, the latest performing forms based on the use of multimedia, etc.

Composer **Rytis Mažulis** was born in 1961 in Šiauliai, Lithuania. In 1978 finished the M. K. Čiurlionis College of Arts in Vilnius. In 1978–1983 studied composition with Prof. Julius Juzeliūnas at the Lithuanian Academy of Music. In 1978–1984 and 1986–1987 lectured on the theory of music at the M. K. Čiurlionis College of Arts. Since 1989 – an associate professor at the Department of Composition of the Lithuanian Academy of Music and Theatre, since 2006 – Head of the Department. In 1988 was awarded the Tyla (Silence) prize initiated by Prof. Raminta Lampsatytė (Hamburg), in 1989 – the prize of the Lithuanian Culture Fund for chamber and vocal music. In 1992, 1997 and 2004 – a State grant, and since September 1998 – the composer's grant of the Akademie Schloss Solitude in Stuttgart. In 2004 – the Lithuanian National Award for Arts and Culture. His chamber, vocal and computer works are performed at many concerts and new music festivals in Lithuania and other European countries.

Jarosław Mianowski. 1966 – born in Torun (Poland). 1985–1990 – studies: musicology (Adam Mickiewicz University, Poznań). 1990 – M.A. of Musicology (*Tonal ethos in the Symphonies and Songs by Mahler*). From 1990 – post at Musical Academy in Poznan, now assisting professor. From 1992 – post at Department of Musicology of Adam Mickiewicz University, Poznań, associate professor. 1997 – Ph.D. (*The Semantics of Keys in the 18th and 19th Ct. German Opera*) (published in Polish 2000). From 2000 – editor-in-chief of the Opera journal *Operomania*, printed in Poznań Opera House. From 2004 program consultant of the Poznań Opera House. 2006 – habilitation (*Affect in the Mozart's and Rossini's Operas*, published in Polish 2004).

Anna G. Piotrowska, Ph. D., is an Associate Professor in the Institute of Musicology at Jagiellonian University, Kraków, Poland. She studied musicology in Jagiellonian University (Poland) and Durham University (UK). Her main scholarly interests concentrate on music in the context of culture, music of the 20th century as well as film music and popular music. She is the author of the book "The idea of national music in the works of American composers in the first half of the 20th century" (2003) and a large number of publications in Polish and English. She has actively participated in many international conferences and workshops in Belgium, Georgia, Czech Republic, Denmark and Hungary.

Pavel Puşcaş. Born in November 1954. He has studied Musicology in the Music Academy Cluj-Napoca, Romania (1974–1978). Lectured on theoretical disciplines (Harmony, Counterpoint, and Musical Forms) in the Music Lyceum in Deva, then Târgu Mureş (1978–1982). Head of the Musical and Art Library in Târgu Mureş (1982–1990).
From 1990 joined the professorial staff of Music Academy Cluj-Napoca as lecturer (1990), reader (1994), professor (2004). Doctor in Musicology (domain: Stylistics-1997), then Doctor in Philosophy (domain: Culture Philosophy – 2006) and Head of the Musicology department. Teacher of Musicology, Music Aesthetics, Stylistics and Musical Forms. Has taught Aesthetics in the Faculty of Philosophy, Academy of Fine Arts and Faculty of Philology in Cluj. Member of UCMR (Union of Composers and Musicologists in Romania), and expert of CNCSIS in the Education Ministry.
He has wrote papers on Musicology, Stylistics, Music Aesthetics and Acoustics presented in national conferences (Bucharest, Iasi, Cluj-Napoca, Timisoara) and abroad, Bergen (Norway), Budapest (Hungary), Athens (Greece), Frankfurt (Germany) etc. Has published *Dynamic of Stylistic Configuration,* and *Mathematical Inferences in the Music Aesthetics;* also dozen of papers in collective volumes.
Special interests in: Systematic Musicology, Rhetoric, Mathematics, Acoustics, Culture Philosophy and Oriental Philosophy.

Kalliopi Stiga was born in 1975 in Athens, Greece. She started studying the piano at age 4 and later joined the Academy of Music of Athens, where she graduated in 2002. In 1987, she won the first prize of the "Maria Kornilaki" pan-Hellenic piano contest. At the same time, she studied at the Faculty of Musical Studies of the Ionian University of Corfou, where she received her diploma in Musicology *cum laude* in 1997. In 1998, she received her post-graduate diploma *cum laude* at the Faculty of Music and Musicology of the Sorbonne University in Paris, France.
Since then, she has focused her research on the area of "the links between text and music" and has studied these links in the works of Greek artist Mikis Theodorakis. Her PhD thesis, entitled "*Mikis Theodorakis: le chantre du rapprochement de la musique savante et de la musique populaire*", is being done under the direction of Professor Anne Penesco. It will be presented on November 2006 at the

Faculty of Musicology of the University Lumière-Lyon 2, in Lyon in France. For her research, she has been honoured by a prize and a grant from the Gazi-Triantafyllopoulos foundation in 2002.

Since September 1998, she is an established teacher in Greece and has worked in the Musical Schools of both Rhodes and Agrinio. When teaching, she tries to apply pluridisciplinary teachings and the learning of music history through varied artistic activities.

Kalliopi Stiga has attended several training programs, such as *Music Therapy Seminar* (Greek Association of Musicotherapy, 1995), *Multimedia and Music* (Ionian University, 1996), *Trans-europe Theater* (Socrates/Comenius, Torino, Italy, 2000).

She has given several conferences in Romania, France and Greece and she has presented papers during the following congresses: "*Musical Education: reality or cultural perspective*" (Greece, 2002), "*The Artist as Intellectual: the Composer Fernando Lopes-Graça*" (Portugal, 2006), "*Music and Society*" (France, 2006).

Mikis Theodorakis refers to the works of Kalliopi Stiga in his book *Where can I find my soul...? / Music*, Athens, Ed. Livanis, 2002, 278 p.

Pianist **Ian Sutherland** holds the degrees of Bachelor of Music (Hons.) and Master of Music, from Memorial University of Newfoundland. He was awarded the University Medal for Excellence in Music for undergraduate studies and subsequently the University Medal for Excellence in Graduate Studies and made a Fellow of the University. Professionally he has been involved in solo, chamber and collaborative performances across Canada, Germany and the Czech Republic, and has been recorded numerous times for Canadian Broadcasting Company radio. From 2003–2005 Ian taught as a Sessional Lecturer at Memorial University of Newfoundland and has been active as a piano instructor and adjudicator for several years. Fellow of Memorial University of Newfoundland, Canada 2005. PhD Candidate – University of Exeter Department of Sociology and Philosophy, UK.

Steven G. Young serves as an Associate Professor of Music at Bridgewater State College, Bridgewater, MA where he teaches courses in music theory and music appreciation. He also serves as the Director of Choral Activities, conducting the college's two choral ensembles. He earned degrees in organ performance from Barrington College and New England Conservatory of Music, as well as his Doctor of Musical Arts degree from Boston University. He also holds the Associate Certificate from the American Guild of Organists. He is the organist/music director at Old South Union Church, S. Weymouth, MA. Dr. Young has performed throughout the United States and Europe as an organ soloist and accompanist. He has presented recitals, workshops, and clinics for national conventions of the American Guild of Organists and the Organ Historical Society. He frequently contributes reviews to the *Choral Journal* and has written liner notes for the complete set of Vierne's organ works as recorded by the Dutch organist Christine Kamp. He maintains an active schedule as a soloist, accompanist, choral clinician, and choral adjudicator.

Audronė Žiūraitytė (1952) is Doctor of Arts and Associate Professor at the Lithuanian Academy of Music and Theatre (Department of Music Theory). In 1987, she defended her doctoral thesis on *Lithuanian Ballet. Formation and Development of the Genre.* She has been Chair of the Musicologists' Section of the Lithuanian Composers' Union (1995–2005). She has edited two monographs: *Algis Žiūraitis* (1996, in Lithuanian and English), *Algis Žiūraitis. Correspondence, recollections* (with CD; 2005, in Lithuanian), selected papers of the 9th Conference of Polish and Lithuanian musicologists *Music in Music* (2004, in Lithuanian and Polish), selected papers of the 38th Baltic Musicological Conference *Musical Work: Boundaries and Iterpretations* (2006, in English and German). She has co-edited material of Symposia *Music of the Twentieth Century within the Horizons of Musicology* (2001, in English and German) and *Deutsch-baltische musikalische Beziehungen: Geschichte – Gegenwart – Zukunf* (2003), *Constructing Modernity and Reconstructing Nationality. Lithuanian Music in the 20th Century* (with CD; 2004). Her publications are mostly concerned with the issues of musical theatre and compositions by Lithuanian composers. In 1991, she won Vladas Jakubėnas Fund (USA) award for her critical essays. In 2005 received diploma from Vytautas Landsbergis Foundation for Lithuanian music research and popularization in collection *Construction Modernity and Reconstruction Nationality. Lithuanian Music in the 20th Century.* She is now completing a monograph dedicated to the music of Lithuanian composer Onutė Narbutaitė.

Muzikos komponavimo principai: ciklo fenomenas
Principles of Music Composing: Phenomenon of a Cycle

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