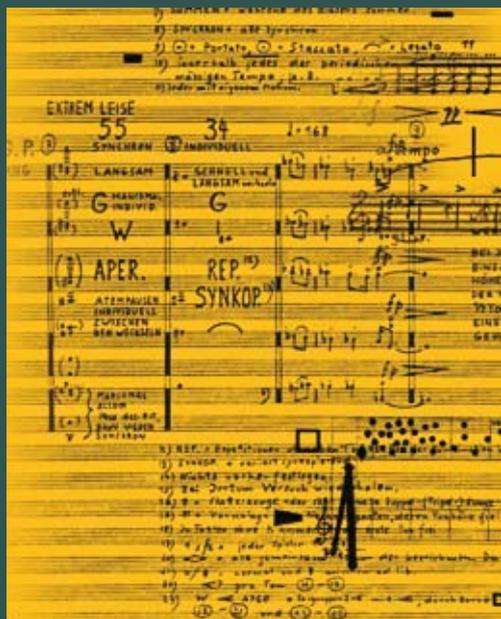


# MUZIKOS KOMPONAVIMO PRINCIPAI: melodijos fenomenas

# XV

# PRINCIPLES OF MUSIC COMPOSING: Phenomenon of Melody





Lietuvos muzikos ir teatro akademija  
Lietuvos kompozitorių sąjunga

Lithuanian Academy of Music and Theatre  
Lithuanian Composers' Union

15-oji tarptautinė  
muzikos teorijos konferencija

Vilnius, 2015 spalio 14–16

15th International  
Music Theory Conference

Vilnius, 14–16 October 2015

**MUZIKOS  
KOMPONAVIMO  
PRINCIPAI:**  
melodijos fenomenas

**PRINCIPLES  
OF MUSIC  
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Phenomenon of Melody

**XV**

Vilnius  
Lietuvos muzikos ir teatro akademija  
2015

ISSN 2351-5155

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Straipsniai recenzuoti *peer review* / Peer reviewed articles

Redagavo / Edited by

Zuzana Šiušaitė

Santraukas į lietuvių k. vertė / Abstracts translated by

Veronika Janatjeva

Rėmėjas / Supported by

Sauliaus Karoso labdaros ir paramos fondas

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## Pratarmė

Skaitytojui pateikiamas leidinys – tai mokslinių straipsnių rinktinė, sudaryta XV tarptautinės muzikos teorijos konferencijos „Muzikos komponavimo principai: melodijos fenomenas“ pranešimų pagrindu. Konferencija vyko 2015 m. spalio 14–16 d. Vilniuje, pažymint 140-ąsias M. K. Čiurlionio gimimo metines.

Konferencijoje savo mokslines idėjas pristatė dvi dešimtys muzikologų ir kompozitorių iš įvairių šalių – Lenkijos, Švedijos, Graikijos, Didžiosios Britanijos, Tailando, Rusijos, Austrijos, Latvijos ir Lietuvos. Leidinyje spausdinami moksliniai straipsniai išdėstyti pagal tris potemes.

I potemė – „**Teoriniai, istoriniai ir technologiniai melodijos aspektai**“. Čia nuodugniau tyrinėjama melodijos prigimtis, ištakos ir technologinio įreikšminimo galimybės. Rimantas Janeliauskas, išgryninęs teorines melodinės linijos konstantas, nustato jos komunikacinius archetipus, tam tikrus modelius, egzistuojančius nuo seniausių iki mūsų laikų. Autorius savo idėjas grindžia lietuvių etnomelodijos, M. K. Čiurlionio ir XX a. kompozitorių melodijų analize. Cécile Bardoux Lovén gilina sielą į disjunktyvių intervalų reikšmes ir funkcijas komponuojant melodiją. Tyrinėtojos akiratyje – muzikologinių idėjų apžvalga (pirmiausia H. Schenkerio, taip pat jo mokytojų ir vėlesnių sekėjų). Liudmila Kazantseva diferencijuoja dvi glaudžiai tarpusavyje susijusias sąvokas – melodijos ir intonacijos, pabrėždama vienos jų diskretiškumą, o kitos monolitiškumą. Markos Lekkas akceptuoja prielaidą – apšvietos šimtmečiais įsitvirtinusių homofoninę melodiją su jos ištakomis ir dėsningumais slepia gili praeitis, susisiekianti su Guido teorine–didaktine paradigma. Remdamasis formalizuotos Eugene'o Narmour'o melodijos koncepcijos elementais, Sigitas Mickis siekia technologinėmis priemonėmis įreikšminti melodijos fenomeno erdvę. Martinas Vishnickas, pasitelkdamas specifines grojimo klasikine gitara technikas, siūlo praturtinti melodijos atlikimo galimybes.

II potemė – „**Estetiniai, stilistiniai ir semantiniai melodijos aspektai**“. Pranešimų spektras pasižymi didele įvairove. Analizuodamas Tōru Takemitsu melodines struktūras, Ramūnas Motiekaitis ieško atsakymo į esminį klausimą – ar kompozitoriaus metodikoje slypinčios specifinės japonų kultūros estetiškos vertybės priskirtinos prie universalių ar tautinių? Dimitris Papageorgiou pristato melodijos plėtotės pasirinktame makamo garsaulyje (*seyir*) teorinę–stilistinę sampratą. Charris Efthimiou aptaria melodinių linijų formavimo ir instrumentuotės (konkrečiai – pirmųjų ir antrųjų smuikų partijų) aspektus A. Rolla simfonijose *D4* ir *e1* (1803–1811). Baiba Jaunslaviete tyrinėja melodinių monogramų įtaką kompozitorių kūrinių stilistikai ir detalai analizuoja latvių kompozitorės Maijos Einfeldes monogramos E-F-[E]-D-E funkcionavimą. Rimantas Astrauskas ypač akcentuoja linijinius lietuvių etnomelodijų išdailių, kurias sukomponeavo M. K. Čiurlionis, aspektus. Išryškindama melodijos kokybės priklausomybę nuo žanro, Inga Jankauskienė aptaria kai kuriuos pastarojo meto lietuvių kompozitoriaus Broniaus Kutavičiaus kūrinius. Pathorn Srikaranonda atskleidžia melodinių linijų tonalinės ir semantinės organizacijos ypatumus savo operoje „*Pero Vaz se Sequeira*“. Kalliopi Stiga apibūdina M. Theodorakio epinės–lyrinės melodijos specifiką.

III potemė – „**Melodija šiuolaikinėje komponavimo praktikoje**“. Šioje pranešimų grupėje tyrinėjamos melodijos fenomeno apraiškos jos ribinėse pozicijose. Apžvelgdamas nemažai eksperimentinės melodijos pavyzdžių, Lawrence Dunnas svarsto klausimą – kuo melodija skiriasi nuo paprasčiausios linijos arba „beveik“ linijos? Rytis Mažulis pristato mikrotoninės melodijos tipus, kuriuos nušlifavo įvairiose savo kompozicijose. Chaldas Langfordas komentuoja kompozicinės darybos procesus, padedančius išryškinti paslėptą melodiką ir tematizmą savo prekompoziciniuose kūriniuose. Zitai Bružaitėi aktualūs melodinės–kanoninės punktuacijos principai; juos autorė iliustruoja šiuolaikinių lietuvių kompozitorių muzikos pavyzdžiais siedama su kūrinių dramaturgine, dinamine visuma ir naujomis komponavimo priemonėmis. Tyrinėdamas G. Crumbo melodinę kalbą, Manos Panayiotakis daugiausia dėmesio skiria garsų aukščio bei tembro parametrų ir sieja juos su egzotinės muzikos medžiaga ir filosofija. Andrius Maslekovas tyrinėja „quasi-melodinių“ elementų ypatybes sonorinėje muzikoje.

Tikimės, kad penkioliktasis „Muzikos komponavimo principų“ tomas sulauks gausaus skaitytojų būrio ir bus naudingas kiekvienam besidominčiam melodijos fenomenu. Redakcinė kolegija tikisi skaitytojų dėmesio tiek Lietuvoje, tiek užsienyje. Būsime dėkingi už visas pastabas ir atsiliepimus apie leidinį. Rengėjų vardu dėkoju visiems prisidėjusiems prie šio leidinio rengimo ir leidybos.

Prof. dr. Rimantas Janeliauskas

## Foreword

This publication is a collection of scientific articles compiled on the basis of the papers delivered at the 15th international conference “Principles of Music Composing: Phenomenon of Melody”. The conference was held in Vilnius on 14–16 October 2015 to mark the 140th birth anniversary of M. K. Čiurlionis. It was organized by the Lithuanian Academy of Music and Theatre and the Lithuanian Composers’ Union.

Twenty musicologists and composers from Poland, Sweden, Greece, Great Britain, Thailand, Russia, Austria, Latvia and Lithuania participated in the conference and presented their scientific ideas. The articles in this collection are divided into three subthemes.

**Subtheme I. Theoretical, Historical and Technological Aspects of Melody.** Here a more thorough analysis is devoted to the nature of melody, its sources and the possibilities of its technological expression. Rimantas Janeliauskas, having purified theoretical constances of a melodic line, determines its communication archetypes, which were noticed a long time ago. The author bases his ideas on the analysis of Lithuanian ethnomonody as well as the melodies by Čiurlionis and the 20th-century composers. Cécile Bardoux Lovén goes deep into the meanings and functions of disjunctive intervals composing a melody. The researcher’s interests embrace musicologists’ ideas on the mentioned aspects – first of all those of H. Schenker, his teachers’ as well as of later followers. Liudmila Kazantseva differentiates two closely interrelated conceptions – that of a melody and intonation, emphasizing discretism of one of them and the solidity of the other. Markos Lekkas accepts a precondition – a homophonic melody, consolidating its position in the enlightenment centuries, is hidden by a deep past with its sources reaching Guido’s theoretical-didactic paradigm. On the basis of the formalized Eugene Narmour’s elements of melody conception, Sigita Mickis makes an attempt to give prominence to the space of melody phenomenon. Martin Vishnick suggests enriching the melody performing possibilities by specific classical guitar techniques.

**Subtheme II. Aesthetic, Stylistic and Semantic Aspects of Melody.** The spectre of reports distinguishes itself by a great variety. Analyzing melodic structures by Törn Takemitsu, Ramūnas Motiekaitis looks for an answer to the principal question – should the specific Japanese culture aesthetic values, resting in the composer’s melodic, be attached to the universal or the national? Dimitris Papageorgiou presents melody expansions by the makam scale, called ‘seyr’, a theoretical-stylistic conception. Charris Efthimiou looks at the design of the melody line and in particular the usage of the violin parts (first and second violins) in Rolla’s symphonies D4 and e1 (1803–1811) from a music-analytical perspective. Baiba Jaunslaviete analyses the influence of melodic monograms on the stylistics of composers’ works, a detailed analysis of the functioning of the monogram E-F-[E]-D-E by the Latvian composer Maija Einfelde is presented. Rimantas Astrauskas particularly emphasizes the linear aspects of the trimming of Lithuanian ethnomelodies composed by Čiurlionis, bringing out the dependence of a melody quality on the genre. Inga Jankauskienė discusses some of the works by the Lithuanian composer Bronius Kutavičius. Pathorn Srikanonda unfolds the peculiarities of the tonal and semantic organization of melodic lines in his opera ‘Pero Vaz de Sequeira’. Kalliopi Stiga characterizes the specific features of M. Theodorakis’ epic-lyrical melody.

**Subtheme III. Melody in Contemporary Composing Practice.** This group of reports reviews the manifestations of the melody phenomenon in its marginal positions. Surveying a wide circle of experimental melody examples, Lawrence Dunn discusses the question: what is it that melody differs from the most simple line or ‘almost’ a line? Rytis Mažulis presents the types of a microtonic melody polished in his various compositions. Chad Langford comments on the processes of compositional formation assisting to bring out a hidden melody and thematism in his written precompositional works. The principles of a melodic-canon punctuation are of interest to Zita Bružaitė. Associating the latter with the work’s dramatic, dynamic whole and the new composing means, she illustrates some musical examples by Lithuanian contemporary composers. Analysing G. Crumb’s melodic language, Manos Panayiotakis paid the greatest attention to the sound height and timbre parameters, associating the latter with the material of exotic music and philosophy. Andrius Maslekovas analyses the peculiarities of ‘quasi-melodic’ elements in sonoric music.

We hope that Volume XV “Principles of Music Composing” will be popular with the readers and will attract attention of all those who are interested in the phenomenon of melody. All comment and criticism are welcome. On behalf of the editors, I thank all who contributed to the preparation and publication of this volume.

Prof. Dr. Rimantas Janeliauskas  
*Translated by Laima Zabulienė*



# 1

TEORINIAI, ISTORINIAI THEORETICAL, HISTORICAL  
IR TECHNOLOGINIAI AND TECHNOLOGICAL  
MELODIJOS ASPEKTAI ASPECTS OF MELODY



## Actualization of the Archetypes of a Melodic Line in M. K. Čiurlionis' and the 20th Century Composers' Works

### Annotation

The archetypes of a melodic line are the models of communication checked up by a thousand-year composing practice. Varying from time to time by the details of sounding such archetypes remain stable in respect of the configuration of the tone line placement – filling up, surrounding, renewal and positioning. They also remain of a general concern in the music of modern times.

**Keywords:** melody, line, archetype, a distant and acoustic interval, movement direction, register.

### Introduction

**Relevance.** Modern composing practice (sonorism, indeterminism, total serialism, minimalism, a sound synthesis, and others) has essentially distanced itself from the phenomenon of melody cultivated for centuries. The composer's interest turns to less cultivated sides of the sounding – the flow of time, timbre, stereophonism, etc.

The depreciation of a melody phenomenon is closely associated with the decline of the possibilities of music communication (partial or even complete). To tell the truth, musical possibilities are searched for and found in other openings of the sound expression. However, new experiences are not strongly enough rooted in the listener's consciousness that could spread in the socium.

Thus, the phenomenon of melody is a serious support for modern music attempting to survive.

**Novelty.** The phenomenon of melody, as mentioned before, is interesting for its communication potencies. It is, however, not always clear what it actually is. A melody is usually conceived as an intricate complex, even a resultative phenomenon where various music formation factors are intertwined – harmony, rhythm, texture and form. However, traditional views on the essential side of melody, a dissociative constant of the formation of this phenomenon, characteristic only of melody, is missing. Due to the deficiency of this kind of characteristics, the phenomenon of melody is principally not cognizable and compositionally mastered. After all, it is impossible to exactly define where melody communication preconditions are hidden.

We suppose that the origin of the melody phenomenon is best of all reflected by the purified conception of a melodic line with merely two constituents, namely: distance interval between different or identical pitch tones and movement direction upwards and downwards of tones. It is the mentioned factors that make it possible to unfold constant, invariant archetypes of a melodic line communication.

**The basic scientific hypothesis** of the present article is stable models of a melodic line, basing archetypal communication functions of the melody, have existed since the oldest times up to the present days. In every period of time these functions remain without any changes, however, they vary by their structural variants. Among them there is a correspondingly altered content of melodic tones, interval distances, the ambits of a line contours, etc. The mentioned and similar things are adapted, taking into account cultural changes and those of the period.

**The principal task** of the present article is to analyse and designate the basic archetypes of a melodic line and to characterize their communication peculiarities. The following preparatory theoretical solutions for this purpose are as follows:

- 1) To discover the criteria making it possible to draw dividing lines between a) the pitch of a melodic and harmonious tone, b) distance and an acoustic interval, c) a linear and register tone direction;
- 2) On the basis of the defined division criterion, to characterize a melodic line, a specific expression of a melody phenomenon, relatively autonomous and independent of the non-melodic origin of things (harmony, rhythm, etc.).

**The object** of the investigation is archaic examples of Lithuanian ethnomonody, the melodies of the works by the genius Lithuanian composer M. K. Čiurlionis as well as the melodies by the composers of the first half of the 20th century (Ives, Britten, Stravinsky, Bartók, Prokofiev, Hindemith, Debussy).

**Methodology.** Some rational methods have been used for the proof of the raised scientific hypothesis. In the first place, musicological works and opinions of the forerunners on melody archetypes are analysed. The analysis of musical examples includes schematization and partly formalization principles. Sometimes comparison and typologisation principles are also employed.

The structure of the work embraces two basic divisions: theoretical and analytical. The theoretical part is devoted to the analysis of musicologists' insights into melody archetypes, obligatory constancies of a melodic line, the archetypes of melodic line communication. The expression possibilities of the investigated models in modern times are unfolded in the analytical part.

### Music Theory of Melody Archetypes

The 20th century witnesses the appearance of several influential theoretical works which interpret the melody phenomenon in an archetypal way. We have in mind the cases when a theorist by way of the primary pro-elements or pro-strength systematically bases various aspects of a melodious expression.

In his atonal melos theory, J. M. Hauer bases himself on an archetype of the melos conception hidden in man's consciousness<sup>1</sup>. Thanks to this archetype, the composer separates atonal tones from obertonal noise.

In Hauer's opinion, "it is only from temperation and the intoning of intervals and tones that music turns into art." The composer maintains that every atonal melody is "the world in itself", into which an intuitive penetration equals a "creative act". In his opinion, thanks to an inner experienced action, contemplation one can only "hear an internally constant absolute of music as a manifestation of the world order"<sup>2</sup>. Therefore, an ideal melos for Hauer is "an initial essence, meaning, the source of the mankind's culture embodied by the forms and laws of language, art, ethics, etc. It is a universal parent language, the harmony of spheres, an indicator of progress, the art of all arts", shortly – "all the universal, cosmos ... spiritualized by melos..." The sensation of melos, according to the composer, is hidden since old in man, and principally decides "his musicality degree". In addition, a historical evolution of musicality would be reminded by the movement "from melos to noise"<sup>3</sup>.

Hauer's conception defines the following most general melody postulates: the intuitivity of the physical sound (interval) enabling one to hear "the eternal manifestation of the world order"; a need to move a musical experience from intuitive to a sensual sphere (a sound colour); the restructuring of physical harmonics according to musicality manifesting man's melos archetype. In his opinion, a polyphonic tendency, unlike an intuitive spiritual melos, is associated with a beast's instinct.

Hauer's conception due to his archetypal melos surviving preconditions is close to E. Kurth's theory of melody "energetism".

According to Kurth, the energy hidden in man stimulates the movement of psychic strength which rearranges a sound matter into a sensual view<sup>4</sup>. This process moves from unconsciously tangible to sensually perceived, from a primary "kinetic energy", pulsating in our consciousness, to the separation of individual tones and their realization in a melodic line. However movement energies as primary archetypal music preconditions are not associated either with elementary physiology (breathing, blood circulation) or the psychology of the sound perception and even with historical stylistic – aesthetic regularities. This power is witnessed by a psychic tension, perceiving the distances between separate tones of a melodic line. Due to psychoenergy, a melodic line opens itself to the subject as an alive musical sensation. Thus, a physical interval in Kurth's conception as a melody phenomenon acquires sense only under the influence of psychoenergetic strength. Besides, they are primary in respect of sounding.

In the opinion of B. Szabolcsi, melody archetypality, its prehistory are associated with the structure of the quartal trichord, the most typical feature of which is a falling step from the minor third to a major second<sup>5</sup>. Trichords can be associated between themselves, separating the latter by the interval of a major second or linking both by a common sound. This kind of drawing up separated and joined trichords opens a pentatonic space, rich in the possibilities of a primary trichord motif variance. The variance of a trichord motif manifests itself in a characteristic case rotating downwards (4-2-1, 2-1-4, 1-4-2). The archetype of a quartal trichord seems to unite in itself pathogenic melodies and logogenic (intervallics and language links) peculiarities<sup>6</sup>.

The essence of H. Schenker's theoretical conception is concentrated in this phrase: "It is due to the life being a continuous change of energy, a lamination of represents the changes of life rising from a primary structure"<sup>7</sup>.

<sup>1</sup> Hauer J. M. 1920. *Vom Wesen des Musikalischen*. Eine Lehrbuch der atonalen Musik. Leipzig-Wien.

Hauer J. M. 1926. *Zwölftontechnik*. Die Lehre von der Tropen. Teoretische Schriften. Bd. 2. Wien-New York.

<sup>2</sup> Pfrogner H. 1953. *Zwölftondung der Töne*. Wien, p. 23.

<sup>3</sup> Hauer J. M. 1923. *Deutung des melos...*, p. 23.

<sup>4</sup> Kurth E. 1917. *Grundlagen des linearen Kontrapunkts*. Bachs melodischer Polyphonie. Bern.

<sup>5</sup> B. Szabolcsi. *A melodia törtenete* (Budapest, 1950, 2/1957, Eng. trans., 1966 as *A History of Melody*). Szabolcsi B. 1959. *Bausteine zu einer Geschichte der melodie*. Budapest.

<sup>6</sup> The New Grove, t. 12, 1980, p. 119-121.

<sup>7</sup> Schenker H. 1979. *Free Composition (Der free Satz)*. Volume III of *New Musical Theories and Fantasies*. New York and London, p. 160.

The scholar motivates the essence of a primary structure (*Ursatz*) turning his glance both to nature (sound spectrum) and a genius (musical practice). The mentioned structure is based on five initial overtones which form a horizontal projection of consonanting intervals (*Zug*, linear progression). The projection a genius' consciousness and intuition gives sense to the profoundness of the composer's plan (*Hintergrund*). A counterpoint voicing principle, irrespective of transformations (*Ausdehnung*, *Diminution*) remains constant also in the upper layers (*Mittelgrund*, *Vordergrund*). Equating the organics of the work growth to a bio organism, which grows from the inside to the exterior, Schenker remarks that the surface (*Vordergrund*) conceals a depth (*Ursatz*) similarly like the meaning of a thought behind the words.

An archetypal structure (*Ursatz*) determines the works melodic and harmonic texture. However, the research carried out by the author proves an exceptional importance of a melodious line for all compositional plans.

Eugene Narmour extends the unique theories of musical perception presented in *The Analysis and Cognition of Basic Melodic Structures*. The two books<sup>8</sup> together constitute the first comprehensive theory of melody founded on psychological research. The author explains and speculates on the cognitive operations by which listeners assimilate and ultimately encode melodic structures.

The conception Eugene Narmour grounded on these general hypotheses – A + A implying A, A + B implying C, the presence of closure or nonclosure, and parametric scale – allow for the identification of five, and only five, kinds of melodic archetypes:

1. Process or iteration (A + A, nonclosural);
2. Reversal (A + B, closural);
3. Registral return;
4. Dyad (i.e., two-element groupings, the unrealized implications of classes 1 and 2);
5. Monad (i.e., one-element groupings, closed or unclosed where no generation of implication occurs).<sup>9</sup>

### Constants of a Melodic Line

A melodic phenomenon can be interpreted as a certain resultative phenomenon stimulated by the whole context of the work. The more so that no greater doubts are raised by one of the principal attributes of this phenomenon, i.e. a melodic line<sup>10</sup>. In order to more properly define a melodic line, it is necessary to single out its several important constants.

First of all – a horizontal. It goes without saying that a melodic horizontal is not a rhythm though, the counting of times is an obligatory condition of the melody materialization. Besides, a definition of the melody horizontal needs a certain condition for the melody materialization, i.e. sequence of tones its contour or relief. It is the latter that principally represents a melodic line.

When characterizing a melodic line, it is first of all necessary to mark its altering sound pitch which shows itself by separate tones. This is how the relief of tones reveals itself as a certain horizontal of rising or falling tones. Equating the perception of tone with a geometric dot, we could imagine a melodic line as a relief of stretching dots.

One more question arises. Is a melodic line possible without tones? The latter – without tones – seems to become a continuous monotone *glissando* not yielding to intervallic articulation. Therefore, the tones are mostly pressing in the sense that they give rise to the potency of a certain linearity of a horizontal. Thus, the tones manifest themselves as certain objective points of linearity. Even more. Melodic tones seem to be the discrete functions of linearity. It goes without saying that these functions are performed due to the variable or recurrent tone pitch. This kind of interpretation of the melodic contour dots leads to the discovery of criteria enabling one to distinguish a tone pitch as an acoustic-spectral, intervallic-harmonic phenomenon from its performed discrete linearity function.

In order to better perceive why a melodic line is principally a phenomenon of tonicity, it is necessary to turn one's glance to a composer's relationship with sounding. This kind of relationship in the most general sense can be twofold, namely, sonantic or tonal. Usually these relations yield to no direct observation, they are latent and subconscious. One can judge about the existence of relationship from the manner of composing. A composer, accepting a sounding as a certain sonantic field, will perform certain actions, which will enable

<sup>8</sup> Narmour E. 1990. The analysis and cognition of basic melodic structures the implication-realization model. The University of Chicago. Narmour E. 1992. The analysis and cognition of melodic complexity: the implication-realization model. The University of Chicago.

<sup>9</sup> See *ibid.* (1990), p. 4–5.

<sup>10</sup> See: Mazel A. 1952. O melodii. P. 96–135, Moscow, Cholopova V. N. 1984. Melodica, p. 39–59, M., Musica. Both authors, characterizing a melodic line, consider a melodic character of a second interval to be its decisive factor. In their turn wide intervals, as they suppose make a secret harmony of a melody.

him to manipulate this field, i.e. to extend or thicken it, reduce and vary. In its turn, a tonicity provision enables one to distinguish tones, as if discrete physical particles of sounding, and to respectfully lay out and draw up. Thus, a melodic formation of tones for an attitude of a melodic line is optimal. The groupings of tones in vertical and other spaces the qualities of tonicity weaken only because the created summary effect, and the latter manifests itself by the cohesion of separate tones, covering or complete fuse. Thus, the tonicity attitude and an optimal linear method of tone placement is the nucleus of a melodic line conception.

It would follow the illustrated unfolding of a melodic line:

1. A melodic horizontal is a discrete relief of the tone pitch, diverted in the direction of irreversible time, always moving forward and never backwards even in the cases when the tones of melody are repeated in a reverse order;
2. The tones (particles) compared to a dot which gives the impression of a stretching line.

Not any lining up of the tones can initiate the impression of a line. A decisive role, arraying melodic tones into a stretching line, undoubtedly belongs to melody intervals. If melodic tones are discrete linearity functions, then the principle role of a melodic line belongs to distance intervals. The later, different from acoustic, harmonic or spectral, expresses only the distance between discrete dots of the line or functions, i.e. – melodic tones.

It would be proper to say that the tonicity of a melodic line is obligatory, first of all, because of the articulation peculiarities of intervallic tone sequence enabling to discover the phenomena of melody linearity.

A melodic line, as it is known, can move by any intervals, narrow and wide, besides, in different directions, upwards and downwards. Though different intervals are found on a line (also exceeding one or even the ambit of two octaves) narrow intervals should be considered priority ones, i.e. major and minor seconds. The latter intervals are particularly useful forming the perception of a linear slide. With the widening of the intoning intervals, especially not supporting the latter by second slides, a melodious linearity slowly dies out (comp. the sequence of thirds, fourths, etc.). The latter are easily intoned not only due to the neighbourhood of adjacent tones but also due to some acoustic features of these intervals. The tones distant at a second acoustically push each other away and are elastic. The tones of a melic second as if push each other away without leaving any acoustic traces (neither real nor secret) with a previously sounding tone. Therefore, an interval at a second is a perfect means for the expression of line discrete seconds serve for the basing of a melodic line perfectly preserves its contour of tonal dots and is easily intoned. In its turn, the intoning of a melody by narrower intervals than a minor second, particularly when the change in a pitch does not reach a diatonic semitone, the contour begins to blend, slide and starts glissanding. Then, a melodic line as a contour of tonal dots loses its substantial peculiarities.

Something similar happens intoning wide intervals. Intoning acoustically greatly different intervals – a fifth, a fourth, the tones of a melodic line begin to interact by the sprung up real and secret acoustic links. The tones of the fifth and the fourth stabilize the flow of the melodic line tones. This stabilization manifests itself by the superiority of one of the tones (of the upper or lower) over others. Other intervals distinguishing themselves by a harmonic-acoustic strength (thirds, sixths) similarly function. In the intervals of a seventh, an acoustic strength weakens. However, linearity does not increase due to a too great distance, i.e. the width of an interval and discretism of the distanced tones. With the widening of an interval the intoning of a melodic line each time becomes more problematic and a melic relationship becomes more difficult to trace. Stepping over two octaves, a linear contour of tones practically breaks up. In similar cases, the tones sound as separate, isolated acoustic dots. In order to make the tones distanced at two or more octave tones as the ingredients of a melodic line, an additional condition of a musical context seems to be necessary (e.g. a prolonged gradual movement in an opposite direction, etc.).

A melodic line moves along a horizontal from tone to tone by various distances, i.e. narrow and wide intervals. Besides, it can change its movement direction, i.e. to move in a rising or falling direction. A register direction is not important for a melodic movement. It is more associated with the specificity of the tone pitch, harmony, spectre and timbre. A direction itself and its changes are essential for a melodic movement. It follows that a rising melodic line each time reaches higher points, tones and intervals of line discretism. In its turn, a falling one moves to the line's lower functions and intervals.

Here follow these principle constant features of a melodic line:

- 1) discrete tonicity functions;
- 2) distant narrow and wide intervals;
- 3) rising and falling directions of discrete tones and distant intervals<sup>11</sup>.

Thus, it remains to clear up what guarantees communication possibilities of a melodic line (about it see further).

<sup>11</sup> E. Narmour prefers perception – registral direction, see *ibid.* (1990, 1992).

### The Archetypes of a Melodic Line

Melodic line archetype can be called a composer's tendency to create linear manifestations of a tone movement, which can be different in details, but does not deviate from the main model. Such models seem to be like prototypes, becoming renewed themselves, repeated all the times.

The origin of melody archetypes (as well as that of various other musical archetypes) in our opinion rests in the intuition of hearing.

The latter, however, are not dissociated from the activity functions of our consciousness. The following hearing intuitions and appropriate melody archetypes should be distinguished on the basis of C. G. Jung's quaternary functions of consciousness<sup>12</sup>:

1. A sensual intuition of hearing;
2. An emotional intuition of hearing;
3. A cogitative intuition of hearing;
4. A prognostic intuition of hearing.

The first manifestations of melodic line archetypes can be discovered in ethnomusic heritages. The analysis of Lithuanian ethnomonodies revealed four stable archetypal melodic-line movement models:

I. The model of the filling in of a melodic line. This archetype guarantees the melody linear character by way of an opposite narrow or wide intervallic interaction. The linear intensity tendency seems to appear under the influence of a sensational hearing intuition.

II. The surrounding melodic line model. A characteristic feature of this archetype is the support of a linear balance, orienting towards the central axis. The stimulus of a linear equilibrium seems to echo an emotional hearing intuition.

III. The archetype of melodic line renovation seems to be directed towards the completion aspects of the line. The line with its new directions and intervals activates the expectation of a logical continuation and ending. Therefore, this archetype is the closest to the thinking consciousness (a thinking intuition of hearing).

IV. A positional archetype initiates a virtual (secret) linear character, creating it in the fluctuation of melodic tops. The virtual linear character of melody is more active in comparison with the real one. This archetype determines the forecast and spontaneity, therefore, the latter is more expedient to be associated with the modus of an intuitive consciousness (prognostic hearing intuition).

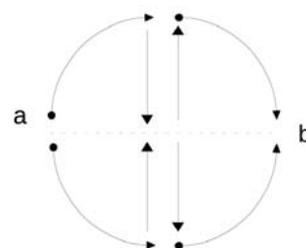
#### I. The Filling in of a Melodic Line

The first archetype of investigation here is associated with the factors basing the linearity of the melody. The linear feeling is caused by the tone slides through narrow intervals, usually by way of major and minor seconds. A consequently rising or falling slide of seconds cannot be boundless. Sounding for a few seconds in turn, a syndrome of inertia starts taking shape in the listener's consciousness. An aesthetically unacceptable attitude to an inertia provokes a tension for surmounting it. Usually, it is done by a sudden line movement, namely, a melodic leap in an opposite direction. If a linear melody character cannot be reached only mechanically prolonging a slide of narrow intervals in some direction, and wide intervals of an opposite direction are necessary for it, then it follows that a melody linearity is also dialectically bound with different intervallics and in opposite melody directions.

The filling in of an archetype unfolds itself by way of several principle models which can be concisely illustrated by a scheme (Scheme 1, here the verticals denote leaps directed upwards or downwards, and the bent lines re-sound gradual slides).

The scheme illustrates how after a melodic jump (vertical  $\downarrow\uparrow$ ) follows its gradual filling of an opposite direction (a). Another time, a gradual movement in one direction is later embraced by a wide leap (b). A summary view of these models would be – (c). Archetypal line filling models are widely known and repeat themselves in different periods of time. On the whole, the filling up of the shapes is characteristic of the consolidation of

a melodic linear character. In order to make sure, it is worth while intoning several seconds in some single pitch direction. As soon as after two second steps one feels the arising inertia of a linear slide. Moving further on, a monotony appears, which as mentioned before, must be removed. It is slightly different if the beginning of



Scheme 1

<sup>12</sup> Jung C. G. 1946. *Psychological Types*. New York. Harcourt, Brace.

a model coincides with a distinct leap. The latter model due to the unexpectedness of a primary leap provokes a hope for a slide to spring up in a different direction.

The elements of the archetypical shape – the slide quality, the embracement of the leap – can vary. It is possible to prolong the slide in one direction, introducing a wider interval or even several intervals. Irrespective of the amount of the slide prolongation, it gets at last monotone. In its turn, a wide interval of an opposite direction can be wider than a proper slide, and sometimes a leap can only partly balance an ambit of a gradual slide.

The discussed archetypal models reflect a possibility of a linear tension, filling an acoustic space with gradually rising or falling tones. Therefore, it is logical to call this model as a filling-in archetype of a melodic line.

Let's analyze some Lithuanian ethnomonodies.

In the first example (Ex. 1) the inertia of the second slides is neutralized by the opposite leaps of thirds at the beginning and end of the melody. The initial jump of a third is filled with downwards moving seconds. Soon, the rising seconds are embraced by a downwards falling third. A wide interval in this context is a third because a leap naturally cannot be wider than a melody ambit.

Sometimes (Ex. 2) a melodic line is developed similarly; but it is expressed by a wider fourth ambit, and a second slide is enriched by surrounding tones (A-C) in its summit (tone B flat). Differently from the previous example, it is impossible here to synchronically articulate archetypal models because a slide of seconds manifests itself as if a common member both for a rising and falling fourth leap (i.e. leap – filling in – leap).

Linear models can be activated and made more dynamic (Ex. 3). Here in the first phrase (m. 1–4) the initial fourth leap is repeated, therefore, an expectation for a filling in a slide increases. In another phrase (m. 5–8) the embracement of the falling slide is made more dynamic, widening intervals (the embraced third is followed by a fourth). Besides the strengthening of a linearity is increased by a fifth jump in the penultimate time (m. 7, B-E). The latter acquires the meaning of a common member in the filling-in model (slide – leap – slide, in Ex. 2 we saw an inverse version).

In the following example (Ex. 4) the strengthening of a linearity is carried out not only widening intervals but also lengthening the slides. Here a leap through a fifth upwards is followed by a short filling in with an omitted second tone (B). Whereas in the following measure (m. 2) a leap gets wider (now a sixth) and a filling lengthens. The widening of the latter is carried out at the end of a slip, introducing an encirclement (A flat-G-F). In the further leap (m. 4) it is again returned to a fifth, however, a slide remains without any changes. Whereas in the last measure, a fifth is filled in with the most minimal expression – a slide down in a second. Thus, melodic linearity shows itself by different filling in intensities, bound with the changes in wide intervals and slides. Therefore, melodic linearity here manifests itself by different filling in intensities, connected with the changes in wide intervals and slides.

The linearity can also expand changing directions both of slides and intervals (Ex. 5). Here (m. 1–4) the initial leap of a fourth is prepared by an encirclement (B flat-D flat-C). Whereas at the end of a gradual descent we shall once more see a surrounding, to be more exact, its inversion (D flat-B flat-C). In the next phrase (m. 5–7), the expectation of a linearity is caused by a fifth lower exhibited interval, which is filled in with a sequence rising in thirds. The intervals of the thirds are inserted in the final slides of the seconds and the ambiguity of thirds discloses itself. After a wide quint leap filling up a third as it would be proper for the category of slide intervals. However, later it seems that

Ex. 1 (JČ 89)

1. Ra - lio, dar va - lio, kar - vy - tės ma - no.

Ex. 2 (JČ 187)

1. Vai, ar auk - se - lis kal - ne žy - dė - jo,  
tau - lė - lio, kal - ne žy - dė(jo)?

Ex. 3 (JČ 183)

1. Už sta - lo sė - dau, gra - žiai dai - na - vau,  
a - lu - ti gė - riau, rau - do - na bu - vau.

Ex. 4 (JČ 162)

1. - Mo - ti - nė - le, ma - no šir - du - žė - le, duo - ki ro - dą,  
kuo man pa - čiā baus - ti, duo - ki ro - dą, kuoman pa - čiā baus(t).

Ex. 5 (JČ 176)

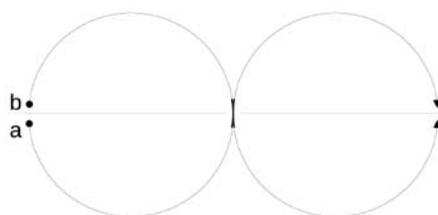
1. - Tė - ve - li ma - no, ma - no šir - de - le,  
šerk man bė - rą žir - ge - li, - ge(t).

the seconds could contradict such a novelty. In spite of it, the distinctness of the quint leap at the beginning of the second phrase enables the whole filling in sequence (with thirds upwards and seconds downwards) to be perceived as gradual. The vividness of the fifth leap is perceived to be determined by the character of the whole melody linear expansion, i.e. wide intervals and filling in slides as well as the interrelation between the rising and falling directions.

## II. The Surroundings of a Melodic Line

The things of melodic line balance characteristic of Archetype II are associated with the spontaneity of melodic windings. A melodic winding appears when a melodic slide changes the direction of moving. Supposing, a slide moving two or more seconds upwards, returns back through one or more tones. In its turn, the falling melodic intonations can soon emerge. Similar windings can embrace a wide ambit or show itself by mere two or three sounds. The winding of a melodic line enables, at least for some time, to avoid the monotony of narrow intervals without using a wider interval. Anyway, a constant winding or the line at last exhausts its communication potency and calls out an impression of a disorderly, chaotically expanding melodic line. A surrounding archetype informs how to avoid it. This archetype can be on a general scale expressed in a sinusoid. Starting in the centre, a melodic line can rise upwards, and then descend. Having returned to the central axis and continuing a movement downwards, it can again return to its centre, rising upwards. A melodic line can repeat itself more than once by similar windings upward down from its central axis. On the other hand, the windings can differ in respect of their volume; besides, they can be complete and partial, etc.

The basic surrounding variants are illustrated by a scheme (Scheme 2).



Scheme 2

The balance between the rising and falling windings is reached constantly orienting the movement of tones to a real or imaginary (secret) axis. The latter can have one, two or more tones, and in this way form a certain central ambit of surroundings. Another time, the axis of surroundings can be more implied than followed according to the really sounding (prevailing, recurring) tones. The position of this kind of axis is mostly witnessed by a regular interchange of border tones and ambits.

An intervallic digression from the axis in the upper and lower windings can be different, thus to be not portional. In its turn, the intervallics of separate windings can be either close, for example (of narrow intervals) or different (i.e. one of them can be of narrow, the other of wide intervals, etc.).

With the widening of the surrounding ambit, the secondness of a sinusoid axis often becomes more important.

It is the balancing around its axis, in respect of the pitch of tones, ambits and both of a narrow and wide intervallics that make the essence of the surrounding archetype. The axis proper can sometimes clear up only in the process of the dispersion of a melodic line.

Here follows the analysis of some surrounding archetype examples in Lithuanian ethnomonodies.

In this example (Ex. 6), the axis of melodic line surroundings comes to light in the course of the expansion. At the beginning of the melody there sound two tones interchanging through a third (A-C). Later, the axis – a materializing tone (B) is heard in a rising slide. In the further balancing stage (m. 2–3), the surrounding amplitude broadens up to the fifth (D-G). This broadening absorbs the earlier sounding tones. Whereas the surrounding axis appears in the centre of the falling slide. It should be mentioned that with the growth of the surrounding sounds, the lines acquire winding intonations. A higher winding (m. 2) is more complex. It is possible to notice at its top an additional micro-surrounding (B-D-C). Whereas a bottom winding (m. 3) gets simpler, reducing the axis (there is no B).

The axis of surroundings can be more imaginary than real (Ex. 7). In the first measures (m. 1–2), there is introduced a widening surrounding amplitude (A-D) without a really sounding axis. Only later, with the narrowing of (D-G), contact is made with an axial tone (here a subsidiary tone F sharp).

The next example (Ex. 8) presents an upper and lower winding, distanced through a fourth. The upper winding is materialized by the tone D micro-surrounding (C sharp-E-D), and the lower by that of tone a (A-B flat-A). Soon (m. 3) medial fourth ambit tones are shown (C sharp and B). It should be proper to interpret the latter as axial tones. Although they sound really, but in the context of the whole melodic line they seem to embody an implied or only a formal axis. It takes shape due to evident fourth windings coordination and parallel the balancing of surroundings not in respect to the axis but that of the fourth.

Another time the axis of surroundings can mutate or undergo changes (Ex. 9). In the first phrase (m. 1–2) the windings of surroundings are oriented to one axial tone (C). In the end of the melody we see another axial tone (B). This change is associated with the mutations of windings. In the primary phrase the upper is more evident (has more tones), and in the second – the lower.

The axis of surroundings can be structured from separate tones (Ex. 10). In the first measure we can see a future axial tone B flat and in the adjacent C. Later both tones follow in succession (B flat-C), and repeating themselves for several times, get consolidated as the axis of the surroundings of a melodic line. Here prevails a harmonious balance between the lower and upper winding intervallics. A second of the upper winding (E flat-D) balances with an axial sound B flat as with a second (G-F) of the lower winding with an axial tone C. To put it briefly, both seconds – upper and lower – are balanced through a fourth interval with axial tones.

The models of surrounding, distinguishing themselves for equilibrium, can be dynamized (Ex. 11). A melodic line is expanded around a central tone axis (G-A). Due to the rising of these tones, an upper winding (the top D<sup>2</sup>) is formed, and falling – a lower winding (the bottom D<sup>1</sup>). Only an upper winding is expanded in a melody. After a primary position, the latter is widened by a subsidiary tone upwards (m. 3), and at the end, the previous figure is lowered at a second down (m. 7), whereas the lower winding remains unchanged. Thus, due to varying the summits (D after C), the surrounding structure is made more dynamic.

### III. The Renewal of a Melodic Line

The third archetype is associated with the melodic line completion. The perception of the completion is formed by the renovation of the melodic contour. For example, the direction of the melodic line shows its great change. Or the narrow sliding intervals change into wide uneven ones. The models of the line renovation activate a perceiver's memory due to the comparison of the previous and new state of the melodic line. This comparativistics stimulates an expectation of a logical continuation or end. It goes without saying that all of it is associated with the depth of the line renovation and evidence. The more vivid contrast between line fragments, the stronger is the hope for completeness. The satisfaction of the latter is also associated with appropriate structural decisions. For example, vividly contrasting the tendency of a melodic direction, soon an attempt is made to avoid the born indeterminateness and is returned to the primary melody position. The very return of a melodious direction can vary in its character – from a sudden, hardly felt, a reviving return, etc.

On the other hand, the renovation of a melodic line direction can occur slowly and finally become renewed only at the end of the melody. Then the directions of the melody beginning and end become the object of comparison.

Ex. 6 (JČ 1)

1. A - pé - jo sau - lu - té ap - lin - kui za - rių.

Ex. 7 (JČ 300)

1. Mer - ge - lés, ká jús čio - nai vei - kiat,  
se - su - lés, ká jús čio - nai vei - kiat?

Ex. 8 (JČ 255)

1. A - ta - jo - ja - rai - tų pul - kas,  
erá - ji - da - mi, bub - ny - da - mi.

Ex. 9 (JČ 259)

1. Mes du bro - liai, mes du bro - liai,  
ir a - bu - du rad - nie - ji, rad - nie - ji.

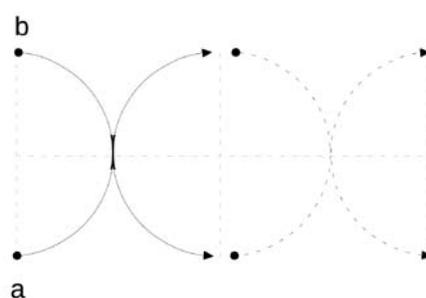
Ex. 10 (JČ 27)

1. Za - lioj gi - riej pauks - čiai gie - ma,  
é mer - ge - lés uo - gas ren - ka, ren(ka).

Ex. 11 (JČ 227)

1. Iš - ka - siu šul - ne - lį vi - du - ry dva - ro,  
ar n'a - teis mer - ge - lė šul - nin van - de - nio.

Archetypal models of the direction renovation are partly illustrated by the scheme (Scheme 3a).

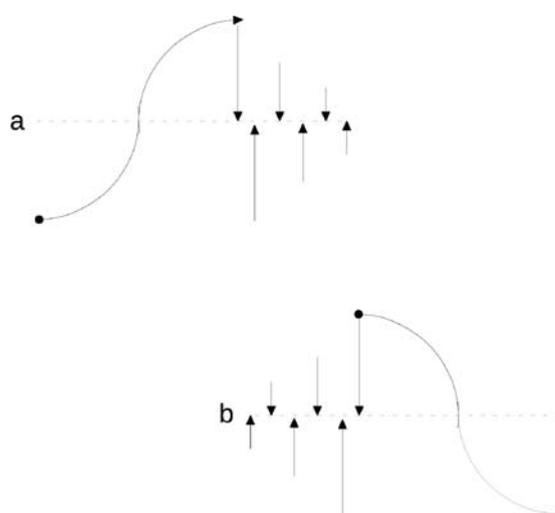


Scheme 3a

An intervallic renovation of a melodic line can also influence the completion of the melody. In this case, line proportions become important. For example, a melody developing by gradual intervals, can materialize its completion in a laconic, leap-based addition. The latter initiates the impression of the reduction of the earlier slides or a resuming summary. Thus, it finishes a development.

On the other hand, the beginning of the line with wide, one after another passages of sounding intervals, one can expect to appear proportionally extended, gradual slides. The birth of the latter can solve the melody line completion aspects.

The models of the renovation of intervallics reflect in part the following (Scheme 3b).



Scheme 3b

It is proper to add that the models of the direction of tone movements and of renovation of interval quality, can supplement one another and to strengthen the whole completeness of a melodic line.

Here follows the analysis of the archetypal renovation in Lithuanian ethnomonodies.

In the example (Ex. 12) a tendency of falling slides is renewed by a rising three sound intonation (m. 3, B flat, C-D). The comparison with the context of all the melody, the latter intonation seems to be episodic, however, greatly initiative in respect of the melody completeness. At the end of the mentioned intonation a surrounding is formed (D-B flat-C) to a primary sound of the returning slide (C). The returned falling slide is expressed more concisely, schematically than at the beginning of the melody. It stimulates the impression of the line completion initiated by the renovation archetype.

In another example (Ex. 13) we can see quite a few analogies with a previous melody, however, other completeness strengthening factors manifest themselves in the direction of the return. Here the returned line does not get shorter but is raised at a second, in comparison with primary measures (m. 1-4). It is an evident influence of the renovated rising intonation (F sharp-A-B-D), after which a second lower sounding ambit seems to have been not enough for the melody to be properly finished. Therefore, the intonation of surrounding (D-B-C sharp) is here directed to the beginning of the slide raised per tone (cf. at the beginning of the melody a sliding is down from B, returning from C sharp). Thus, due to the collision with different line directions,

an acceptable ambit of the returning line is discovered. It seems to stimulate the strengthening of archetypically determined completion of the melody.

After the renewal of the melody direction, some new line qualities can be extended and strengthened (Ex. 14). In an expositional stage (m. 1–4) we can see two line phrases, i.e. rising – falling, or convex (m. 1–2) and falling – rising, or concave (m. 2–4). The further line expansion is based on falling intonations which finish the melody. This kind of a completion form arises due to a common uniting denominator, i.e. a falling direction which is later intensively unfolded characteristic of both a concave and a convex line. Particularly clearly a falling line is heard at the end, and it creates a contrast collision with a rising beginning of the melody. This distant comparison sequel is perceived as a holistic completion of the melody. It is proper to add here that for the activation of the listener's memory it is important both concave and convex beginnings of the lines which on a smaller scale (initial phrase) correlate similarly alternatively as a melody beginning with its end (i.e. on the scale of the whole melody).

The completeness of a melodic line can be also strongly influenced by its intervallic renovation (Ex. 15). For example, intensively widening a descending melody line contour (here almost every tone has its surrounding, m. 1–4) follows an embracing, resuming end of wide intervals (m. 5–6). Here we can see wide intervals directed upwards (a sixth, a fourth) and downwards (a fifth, a third). The interval leaps create the impression of the earlier sounding slide reduction. This completion impression can be also shortly called the discharge of the linear tension.

A reverse case can be also found when at the beginning is posed a melodic line of principally wide intervallics (Ex. 16). Here in relief appear the intervals of a fourth and a fifth (with subsidiary seconds at the bottom). The second motif (m. 2) is raised at a fourth. In this way a wide intoning space is embraced. This space is sketchy, not filled with tones, and it cannot potentially widen itself only due to the leaps. Therefore, it appears waiting for a contrast to slide intervallics which is realized in another stage of the melody extend (m. 2–4). A subsidiary second (a falling gradual slide) finds its place in the very centre of the melodic line. It does not fill up the whole melody ambit, only part of it, i.e. a fifth (C-F). But that is enough. Shortenings in time as well as the narrowing of ambit always serve for the strengthening of the melodic line completeness.

Line completeness can be reached making use of both means at the same time, i.e. directions and intervals (Ex. 17). The first phrase of the melody expose a slide down (through the ambit of the seventh) with an intervening tone surrounding (G-B-A). Soon (m. 3) a wide ambit is embraced upwards. Here the leaps of single-direction fourths and fifths are used. The wide intervals are enriched by subsidiary seconds from the top and the bottom (D-G-A and A-B-E). The renewed quality of intervallics permits this melody to be relatively finished (a fermata above E<sup>2</sup>). The wide intervallics as if reduces the slide of the previous phrase. However, the ambiguity of the reverse direction (in comparison with the beginning) stimulates the return of the primary melody stage. The latter appears in a concise shape. Thus, this melodic line distinguishes itself by a double renovation – that of intervallics and directions. These means, each in their turn, realize the completeness of the melody. One time as an intervallic reduction, and another as the returning of a melodic direction.

Ex. 12 (JČ 232)

1. Oi sa - ka - lė - li,  
draub - nas paukš - te - li,

Ex. 13 (JČ 175)

1. Vai, žy - di žy - di ža - lias bi - jū - nė - lis,  
kaip jis yra - žiai žy - dė - jo, taip jis sal - džiai kve - pė - jo.

Ex. 14 (JČ 14)

1. - Sto - ki - tės, po - nai, po vic - nam šo - ne,  
ža - lia rū - te - lė da - rad - ly - vo - ji.

Ex. 15 (JČ 52)

1. Už bal - to sta - lo sé - dė - jau, su die - ve - rė - liais  
kal - bė - jau, su die - ve - rė - liais kal - bė - jau.

Ex. 16 (JČ 156)

1. Vai, ant kal - ne - lio aukš - to - jo,  
ža - lia lie - pe - lė žy - dė - jo.

Ex. 17 (JČ 173)

1. Bal - noj bro - lis bė - rą žir - gą,  
bė - rą žir - gą juod - bė - rė - lį.

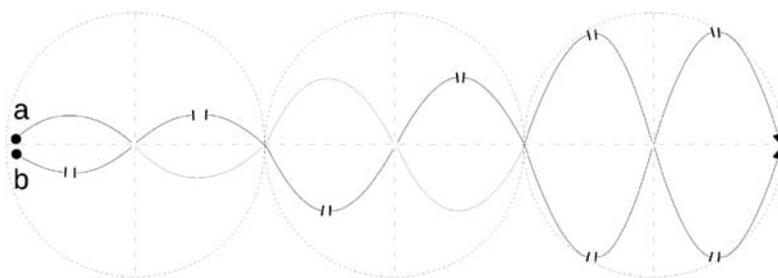
#### IV. The Positioning of a Melodic Line

The fourth archetype is associated with secret melody lines, which guarantee linearity on a greater scale. The secret or virtual linearity should be associated with such important features as foreknowledge of a melody, the spontaneity of melody extension, etc. A virtual linearity turns up due to summarily influencing musical factors, however, it is the change of line pitch positions that should be considered to be an archetypal factor. The latter seldom coincides with a consecutive sequence of the melody tones and usually occurs in the process of a melodic contour waving. With the rise of the wave upwards, the pitch position clears up. It can continue by further summits. The latter in their turn can be directed downwards and descend every time to a lower position. The waving of a melodic contour showing its meaning by way of the summit pitch can be called positioning.

The virtual positional plan of pitch can variously intercut with a real melody line. Here several relationship models are possible. For example, a positional plan repeats in an augmented form the initial nucleus of a melodic line filling. The intervallics of the augmented virtual and real line (more exactly of its nucleus) can coincide, be identical.

In another case, the sequence of slide line motifs is framed by the intervals of distanced positional tones. And vice versa. A distinctly raised or lowered melodic ambit is linearized by a virtual slide. The latter two models often tune up narrow and wide intervals among different melody plans (of real and virtual).

Positional models are partly illustrated by the scheme (Scheme 4).



Scheme 4

The interaction of different linear plans sometimes enables to prognosticate the continuation of a melody (even at the listener's wished direction). Due to these qualities arises the sensation of a spontaneous line extension and is realized as linear type of a higher level. This makes a positional archetype exceptional.

A positional archetype will be illustrated by Lithuanian ethnomonody examples.

In the melody an ambit is distinctly lowered (Ex. 18). This lowering (m. 6–10) in comparison with the beginning, becomes like the fourth leap. The linearity is supported by a virtual slide of the pitch position slide, beginning with the highest tone and finishing with the lowest (F-E-D-C-A). Positions mostly become distinct as the tones of the summits. Two adjacent tones can also become distinct – we can see in the first wave (F-E). The following position fixes inertially another tone, the summit of the lowered wave (C) and a slide inertially turns to the lowest tone (A). The inertia of a virtual line slide levels the leap of the ambits and supports linearity on the scale of the whole melody.

A melodic ambit can give a rise (Ex. 19). The latter is easily perceived following a virtual plan of the tops. The initial top in the next bar rises by a second (D-E), and in the second phrase it is lowered (D-B). A tonal composition of the ambits of a melodic line is very close (D-C sharp-B and A-F sharp and E-A-A sharp and A-F sharp). However, an unexpected fifth leap in a melodic line gives a possibility to separate the raised ambit. By the way, a potential of a distinct leap is prepared on a real line, making use of the filling-in slide for a primary leap of the sixth. Similarly, like in the previous example, we again see a levelling interaction of a melodic line leaps and positional slides. The latter continues to the very end. By the way, the last fourth leap directed downwards is evidently linearly correlated with the slide of virtual positions downwards.

The slides of the melodic line and the sequence of positional summits can be intervallically very close (Ex. 20). Melodic windings, diapasonically and intervallically widening, correlate with gradually rising lines of positions (C-D-E). It is possible to notice, like of an initial intonation (A-B-C), a slightly raised through a third augmentation. It strengthens the summarized linearity of the melody. In the second phrase (m. 3–4) the inertia of a virtual linearity is surmounted by a leap to a final tone (A). An interesting detail appears. The ends of the melody phases correlate by their intervals in an opposite way. At the end of the first phrase a leap

of the fourth appears on a real line and that of the second – virtual. Besides, the leaps are of different directions and seem to frame linearity.

A virtual linearity can augmentally repeat an initial nucleus of a melodic line (Ex. 21). The primary filling nucleus, as we can see here, after a leap through a sixth upwards is followed by a slide filled with seconds. This slide is continued by the falling pitch position on the scale of the whole melody (C-B-A-G-F-E). They create a virtual linearity of the melody. The inertia of falling positions is opposed to the development of a real melodic line. The latter distinguishes itself by the abundance of wide intervals (an exception is only a primary filling in nucleus). The inertia of the slide of positional tones inspires the guessing of a melodic development in the most general direction. It is an essential condition for the coherent expression of a melodic quality.

Sometimes a positioning melody plan can get synchronized with the tendencies of a real line (Ex. 22). Here a virtual line begins with surrounding imitating positional tones (C sharp-D-B), which later inertically prolong downwards (C sharp-D-B-A-F sharp). In the second phrase (m. 5–8) these tones follow reversedly and create an opposite direction tendency. Whereas real melodic intonation lines with their directions nowhere contradict positional slides and create an integral, strengthened (reasoning) linearity of both plans.

The coincidences of the contour of virtual and real tones can mark the moment of the climax breaking of the whole melody (Ex. 23). Here, in the initial phrase, is sequentially exposed downwards sliding a filling-up motif. The ends of this motif and its sequence ends get framed by positional tones (G and C). Later, positional tones lose their virtuality, because they fully merge with the continuation of a melodic line (C-G, m. 5). In the end, again returns a positioning virtuality (m. 6–7). Thus, we can see in the melody a possibility for positional tones to rise to the line culminating relief and again to sink to a virtuality background. The interchange of the relief and background in a virtual and real melody plans, we think is an intensive linearity factor of the melody.

### The Melody Archetypes in M. K. Čiurlionis' Works

One can notice in M. K. Čiurlionis' works manifestations of all melodic archetypes and their topicality. A melodic line is made topical in the frame of the tonality characteristic of the late romantics, widely cultivating a homophonic and polyphonic texture. Principally, the melody of works is the basic element of an artistic expression. Although the correlation of the latter with harmony, rhythm, registration, etc. is holistic and authentic, the importance of a melodic line, even under the most complicated circumstances of a musical context, remains untouched and non-denied. This is why Čiurlionis' melodic line is worth analyzing as such.

We shall analyse some examples.

The composer makes topical the archetype of a melodic line filling, turning to distant leaps and their maximally dense chromatic filling (Ex. 24). Here we can see a primary leap (from B) through two octaves (with an intervening through an octave sixteenth) and a filling advancing by semitones through a six. The linear tension strengthens a primary phrase sequentially repeating through a fourth higher (from E flat). Now the leap is smaller, reaches about one and a half octave and a filling slide is heterophonized, doubling the latter by a sixth interval (a parallel sixth). The episode of parallel sixths again ends in leaps (this time in octaves). This is how a melodic line is dynamized – each time the leaps are diminished, and a chromatic filling is heterophonized.

Ex. 18 (JČ 29)

1. Šė - džiu po lan - gu, žiū - riu pro lan - gą, iš kur  
vė - je - lis pu - čia, iš kur vė - je - lis pu(čia).

Ex. 19 (JČ 32)

1. Jau sau - lu - tė u - žu - sė - do,  
si - ra - tė - lė už - bli - di - jo.

Ex. 20 (JČ 252)

1. Su - ba - tė - lės va - ka - rė - li,  
ne - dė - lė - lės iš - gry - tė - li.

Ex. 21 (JČ 17)

1. Siū - ba - vo ber - žė - lis tė - vo dva - re, ber - žė - lis ža - lia - sai  
tė - vo dva - re, ber - žė - lis ža - lia - sai tė - vo dva - re.

Ex. 22 (JČ 171)

1. Pas sa - vo mo - ti - nė - lę, pas sa - vo šir - du - žė - lę,  
rė - te - le dy - gau, mė - ta lve - pė - jau,

Ex. 23 (JČ 154)

1. Už - ku - ka - vo ge - gu - tė, už - ku - ka - vo rai - bo - ji,  
už - ku - ka - vo rai - bo - ji.

A similar dynamized filling in model can be seen in another example (Ex. 25). The exclusiveness of this melody – the windings of fillings. The primary (complex) leap through a tenth (on the way G sharp intervenes) follows a chromatic made falling filling which soon (reaching A) changes its direction (“turns round”) and prepares a further leap an octave higher. Again follows a filling with a “turning round” winding, however, more laconic and shorter. At the end of the melody – a leap upwards again – now through a fourth. On the whole we see a narrowing leaps but at the same time shortening fillings.

In Čiurlionis’ melodics, the archetypes of a melody surrounding are greatly inventive (Ex. 26). Here, gradually falling line from the summit (B) reaches an axe (in fact a side of the axe, m. 3) after which an opposite direction movement begins from the bottom. After the some tones (E-F-G), this slide temporally breaks. During the phase of the break of the line (m. 5) an ambit of an axis surrounding, consisting of a trichord sounds (D-C sharp-A) is repeated. The trichord itself is developed by falling intonations which provoke a further prolongation of a rising line (m. 6). The prolonged line on its peak (A) is turned back (A-F-D). In this way, a wave of a wide amplitude (about an octave and a half downwards and then upwards) is for some time suspended on its way upwards, focusing a perceiver’s attention to a trichord melody axis. The discovery of an axis at a proper place and time (in the aria of the golden section!) balances the whole of the melody.

Surrounding another archetype actualization is connected with the swing of the windings (Ex. 27). The first measures exposed two surrounding motives distanced at a fourth. One of them with a higher axis D sharp (m. 1), another – a lower A sharp (m. 2). A melody line is extended slowly, stirring up the second motif. In the beginning it sounds low-pitched (m. 3), later higher (m. 4). It is again returned to a lower position and at last through the fifth heightened, it reaches a climax summit ( $G^2$ , m. 6). This climax winding principally returns the melodic line to the positions of the first winding tones. Of interest is the fact that the latter begins in the sound D sharp, i.e. the first axial tone. Thus, the structure of the melody line swing is a winding on a greater scale. In other words, an enlarged, augmented expression by small initial windings on the scale of the whole melody. Judging about the axis of such an enlarged swaying, one should return to the exposition of the primary surrounding motifs. The enlarged ambit summary of the latter is materialized by the final accord F sharp. Thus, it is this accord that balances the melody.

The composer creating an actualized archetype of a melodic line renewing also experiences some interesting and creative transformations. The renovation of contrastive directions is original (Ex. 28). Here, the rising oppositional (distanced at a second) fourth-sixth-chord arpège figures soon, in respect of the direction, are renewed, making use of the contour of the broken septachord fifths. Close ambits of a rising and falling melodic direction make it possible to finish the melody by a final tone, whereas the latter distanced through a triton interval both from the upper and lower ambit edge (i.e.  $A^1$ -F sharp-A), thus, through the very middle of the melodic line octavic ambit.

Ex. 24 (VL 310)

Andante

Ex. 25 (VL 303)

Impetuoso

Ex. 26 (VL 395)

Tranquillo

Ex. 27 (VL 186)

Animato cantabile

Ex. 28 (VL 256)

Lento molto un poco pesante

Topical are the things of the renewal of a melodic line associated with a contrast of intervallics (Ex. 29). Here the renewal of an initial fourth-fifth chain of leaps falls on a second slide. The impression of the melodic line finish is created not so much proportionally (because both the leaps and the slide last nearly the same time) as by the use of the return of the initial leaps (m. 2). Worth of attention is a single typicality of the directions of the whole melodic line. Both the leaps and the slides are falling, i.e. move only downwards. Therefore, the memorizing of the melody and an expectation of the finish exceptionally fall on the contrasts of intervallics.

A **positioning archetype** in Čiurlionis' melody lines is particularly interesting in respect of the intervallic leap combinatorics. For example, a leap through a fourth upwards is unexpectedly introduced into a melody line developing in a parallel thirds (Ex. 30). Another leap (m. 2) begins to form top positions rising to climax (C sharp). Later, they withdraw through a third downwards (A sharp). Repeating the melody, the latter modulates from A major to F major key. The smoothness of modulation should be associated with a preparatory slide of virtual positions (G sharp-A from m. 3 to 4). On the other hand, the leading by parallel thirds renders the latter a heterophonic strengthening of linearity. The preconditions of this factor should be looked for in the intervallics of the positional virtual plan.

The Fugue B flat minor theme is the positional melody (Ex. 31). A virtual plan of the Fugue's theme is based on the rising tops (F-A-C-F) and the falling ones (B-E flat). The rising positions virtually space out the accord tones of a dominant function of B flat minor key, and the falling – of a subdominant. We suppose that it determines the guessing and smoothness of the melodic line.

### Archetypes in the 20th-Century Melodics

The **filling-in type** is not very often actualized in the 20th-century melodics. It may be the reason why it was very widely exploited in the music of the last centuries. Irrespective of their rareness, however, linear models are actualized, opening subtle possibilities of an artistic expression. Below follows one of the examples (Ex. 32). Here melodic linearity is each time strengthened, making use of surrounding intentions. The initial rising slides, surrounding top (D sharp-C sharp-E) is lowered by the sixth's leap. Another phrase (m. 6) started in a reverse order – after the leap of the sixth upwards follows a falling filling in. The latter also ends is surrounding (E sharp-G sharp-F sharp), whereas the further course (m. 8–9) is ambiguous. It can be perceived as a widened surrounding with an axial tone (D sharp). On the other hand, it can remind of the summary of the first filling in (i.e. m. 1–6). At the end of the third phrase (m. 10–13 the filling in after the leap) we can see an extended surrounding (m. 12–13). Here an axis clears up (F sharp and its variant G). The development of linearity, with every filling in phase, introducing more intensive surrounding, is crowned with an augmented expression of surrounding (m. 14–16, an axial tone F sharp). In this segment, we can see the fragments of the falling and rising slide (m. 15) absorbed by an enlarged, augmented winding.

Actualizations of the **archetype of surrounding** in the 20th century melodics rather often display their subtle reasons (Ex. 33). Here, both surrounding windings, both the upper and the lower, are marked by melodic leaps (from a sixth up to a third inclusive). The axial tone balancing a melodic line appears at the beginning and end of the phrase (m. 1–3). Later, another version of surrounding intervenes based on the intervals characteristic of the slides (i.e. seconds and minor thirds). The axial tone remains the same (m. 3–7). The surrounding twists of wide and narrow intervals are contrasting both in respect of the quality of intervallics and the sequence

Ex. 29 (VL 327)  
Andante



Ex. 30 (VL 335)  
Andante



Ex. 31 (VL 345)



of the higher and lower winding. In the second surrounding the windings are arranged in an opposite order (at first a lower winding, then follows higher). The contrasts between the surroundings, by the way, determine a (quasi) antiphonic character of the extension of a melodic line.

Another example (Ex. 34) stands out from the surroundings of the chromatic slide oriented to a balanced axis with two, one another changing tones (F sharp and F). Systematically rising semitonal intervallics of the slides, some leaps are inserted between the tops of the bottom and upper windings. Exposing a primary surrounding (axis F sharp), the top of the windings distances itself by a major third (E-A flat). It is also similarly moved away in climax, only now through an octave (C<sup>1</sup>-C). It is easy to notice that the mode (C<sup>1</sup>-E<sup>1</sup>-A flat<sup>1</sup>-C<sup>2</sup>) of major thirds is associated with a primary axis. In the next phrase (2) the axis of the slides changes (now F). First of all it is confirmed by a leap through a third (D-F). Besides, a rising slide, embracing the ambit of a tritone (D-A flat), intervenes a rising slide. It is logical to think that the new axis is possibly associated with the modus of minor thirds (D-F-A flat-B, the tone B is final, completing a melodic line). In the further phrase (3), it is moved to a climax (C<sup>2</sup>) by minor seconds, and after an allusion to a bottom top (C<sup>1</sup>) it is again gradually descended. Thus, the ambits of slides widen till a sixth (E<sup>1</sup>-C<sup>2</sup>, rising) and seventh (D flat<sup>2</sup>-E flat<sup>1</sup>, falling). In the last phrase (4) slide directions are exchanged, comparing with a previous climax phrase. At the beginning it is sliding by semitones downwards (F-E-E flat-D), and at the end by the tones upwards (F-G-A-H). An axial sound (F sharp) is inserted among them. Due to the use of a slide of a new quality by full tones upwards, a systematic flow of semitones logically stops.

**Archetypical renewal models** are also often actualized in the 20th century music. With the renewal of a melodic line direction or intervals, returning or intermediate formations are often employed for the completion of the melody. A gradual descent, embracing a ninth interval (Ex. 35), is renewed by the movement of an opposite direction (m. 3). In the first stage of the rising slide a surrounding intonation is used (A flat-G-A), and in the end sounds a leap of the fourth upwards. Due to the direction renewal by these means, a mechanical character and inertia are avoided and the opposition of directions is completed returning to an initial direction. The beginning of the return coincides with the surrounding (F sharp-G-E, m. 5) and the end with the introduction of an additional winding (m. 7-8), strengthening the final tone of the slide (G). This strengthening, besides, is delicately prepared by the surrounding intonation (G-B-A, m. 6). Making use of the direction return leads to the end of

### Ex. 32 (C. Debussy. 5 Poèmes De Baudelaire/ II)

### Ex. 33 (B. Britten. Who are these children?/ 3)

### Ex. 34 (Ch. Ives. Song "Like a sick eagle")

### Ex. 35 (Ch. Ives. Song "Disclosure")

the expositional melodic line stage, whereas the stage of expansion is associated with the mixed character of the line directions (m. 9–11). Here the falling intonations are co-ordinated with intervallic lifting (through a fourth, a third a triton and again a fourth and a third). The end of the extension clears the mixed up episode of a falling and rising direction (i.e. a winding, m. 11) leading to a recapitulation of the falling line. This is how the whole of a melodic line completed, distinguished for a triad of narrative functions: exposition – development – recapitulation.

The archetype of an intervallic renewal can be actualized in a similar way (Ex. 36). The melodic line of the first sentence is renewed in its midway by wide leaps of the sixths. The border tones of these leaps compose secret sliding lines which with their direction downwards contradict the rising beginning of the melody. The hidden conflict of directions cannot be solved spontaneously emerging wide intervals as if for the former slide reduction. A return is also complicated due to a laconic character of the very motifs. It seems not by chance that the first sentence is repeated. Therefore, the falling slides are extended by upwards directed intervals of the thirds (m. 7–9). Wide intervallics – the narrowing of the sixth up to a thirds is one of the elements of this compromise game. This kind of the narrowing of the intervals is logical because here the leaps of the thirds appear after a falling slide (G flat-F-E flat, i.e. made the real upper secret line of the sixth).

An intervallic renewal of a melodic line can happen continuously, renewing intervals with every phase (Ex. 37). Here, one can notice every time changing modi of different intervallics: tone-tone (1), diatonic/Dorian (2), chromatic (3), tone-semitone (4), diatonic/Phrygian (5):

Modi	tone-tone	diatonic/Dorian	chromatic	tone-semitone	diatonic/Phrygian
Phases	1	2	3	4	5

As in diatonic slides one can also notice some intervals at the thirds, therefore, these modi can be conditionally considered to be wide. Then, the most contrastive would be the narrowest representative of intervallics – chromatic, whereas the remaining would occupy an intermediate, or mixed position. The sequence of modi on a melodic line is interesting due to the application of a scheme of a diatonic modus return with an intervening tone-semitone ... modus, whereas the introduction of the melody is represented by another intermediate modus of the whole tones. Thus, the scheme of the modus sequence scheme should be such.

**The positional archetype** similarly like the filling in models seen in the 20th century melodies is found more seldom. Let us recollect modulations, sequences, etc. Irrespective of impressive past achievements, today this archetype has not yet exhausted its potential.

The following melody extract (Ex. 38) demonstrates slowly rising summits of melodic windings. After a primary tone (A sharp) we can see them rising up to the fourth position (B-C-D-E flat). The last summit acquires a distinct augmentation shape. A virtual linearity is prolonged by a falling contour of secret leaps (m. 8–11). Here we can see rhythmically diminished positions of virtual leaps (C sharp- F sharp-B-E-F sharp). These leaps are directed downwards. Therefore, the whole of the melodic line reminds of a filling-in model, manifesting itself on a larger scale.

Of interest is an example with a double positioning (Ex. 39). Here two virtual lines operate. The initial motives bring to light lower (E) and higher (A) positions. The latter potentially starts a higher virtual line. The surrounding is typical of it. After the leap (A-D) follow surrounding virtual tones (C-E), and further the slide is prolonged (B flat). This contour is proper to be interpreted as falling. Let's imagine a slide without a surrounding (E-D-C and would end in B flat). In its turn, a lower position continuous a lower virtual line

Ex. 36 (B. Britten. *Who are these children?/ 8*)

Ex. 37 (Ch. Ives. Song "Afterglow")

(i.e. E-F-E and E-G flat). A double positioning of a melodic line strengthens the manifestations of linearity. By the way, a real line is principally based on falling slides, and between positional plans the leaps sound particularly clearly, especially in climax (m. 8–9). Here virtual lines merge with a real melodic line.

In frequent cases, the 20th century composers, creating a melodic line of a greater volume, do not limit themselves to one melodic archetype, but also actualize others and sometimes all the four (Ex. 40). One can notice on such a melodic line how various archetypical models successively manifest themselves one after another. In an expository sentence of a melodic line (m. 1–8), the surrounding and renewal archetypes are actualized. The first phrase is structured by surrounding models. Here the windings of the line are based on a rising and falling intervallics of a thirds with an intervening axis in the centre (F sharp-F-A flat). A similar model is also used in the second phrase, however, with another axle and intervallics. Now the axis is given sense by two tones (E-D), and the intervallics of melodic windings is based on the intonations of trichords (the fourth and seconds). In view of the fact that the surroundings of both phrases have not only different axes but also contrast with their intervallics. Therefore, the sentence of both phrases also realizes the archetype of renovation. The further extension phase stands out for the actualizations of the positioning and filling in models (m. 8–18). The beginning of the extension shows a strongly raised position. Soon after a triad rising and falling intonations (m. 8–9), both the upper and lower position rise through a six upwards. From here two virtual positioning lines (the upper A flat-A-C (F sharp) G-(D) E flat-B-G and the lower (D) D flat-B flat-G flat-E flat) are structured. The positional tones of virtual lines move by the trajectories of third structures, reminding of the melody initial intonations. At the end of the extension, a melodic line is activated by a chromatic filling in of the leaps (at the beginning of a seventh leap upwards, m. 16–17, and in the end of a ninth, m. 18).

The actualizations of all the four archetypes within the scope of a single melody, undoubtedly, render the melody exceptional possibilities for its artistic expression.

### Conclusions and Results

The conducted research of melodic line archetypes, making use of the analysis of musicological literature and music examples enabled to make the following essential conclusion: a melody line since its early examples up to the present time unfolds itself by archetypal invariant communication models. This conclusion supposes an entire series of theoretical and analytical results, such as:

1. There are only four archetypes of a melodic line, namely – filling in, surrounding, renewing and positioning.
2. Each of these archetypes distinguishes itself by a concrete communication model.
3. Communication features of a model are witnessed by the stability of their expression, independent of the cultural and period changes.

### Ex. 38 (B. Britten. *Who are these children?*/ 10)

### Ex. 39 (Ch. Ives. Song "Ann Street")

### Ex. 40 (B. Bartok. *Violin Concerto No. 1*/ I)

4. The establishment of archetypal models of a melodic line became possible purifying a theoretical conception of a melodic line. The following basic components of this conception have been established:

- a) a melodic tone as a discrete function of the line;
- b) a melodic interval – the distance between the functions of the line;
- c) the movement of a melodic line – directions of distance intervals upwards or downwards.

5. On the basis of the analysis of Lithuanian ethnomonody the following peculiarities of a melodic line have been singled out:

- a) a possibility of a linear tension, filling in a wide interval with gradually rising and falling slides in a opposite direction is characteristic of the filling in archetype of a melodic line (see Scheme 1);
- b) the archetype of the surrounding melody line distinguishes itself by the balancing of a melodic movement round its axis both in respect of melodic tones, tone ambits and narrow and wide intervallics (see Scheme 2);
- c) the archetype of the renewal of a melodic line brings out the aspects of a line completion which manifest themselves contrasting the directions of a line intervals or their qualities (see Schemes 3a, 3b);
- d) the positional archetype of a melodic line guarantees the linear character of the melody on a larger scale, i.e. creating a virtual change of the tops of the wave (positions) (see Scheme 4).

6. Archetypal models of a melodic line grow topical in the 20th century music, changing and varying a structural covering. For example, in M. K. Čiurlionis' works various archetypes of a melodic line become topical by the expression means characteristic of later period romantics, whereas other composers of the first half of the 20th century usually modernize these means (Ives, Debussy, Britten, Stravinsky, Bartók, Prokofiev and others).

### Abbreviations

JČ – Čiurlionytė Jadvyga (1999). Lietuvių liaudies melodijos [Lithuanian Folk Melodies]. Vilnius: Lietuvos muzikos akademija.

VL – Čiurlionis M. K. (2004). Kūriniai fortepijonui. Visuma [Compositions for piano. Completed]. Kaunas: Jono Petronio leidykla.

### Melodinės linijos archetipų aktualizacija M. K. Čiurlionio ir XX a. kompozitorių kūrinuose Santrauka

Muzikos archetipai yra muzikos tradicijos patikrinti komunikavimo modeliai, užtikrinantys meno gyvybingumą. Jų dalinis ar visiškas atsiskyrimas veda į muzikos meno nykimą. Muzikos archetipai susiję su visais komponavimo dalykais, pavyzdžiui, aktualūs yra ritmą artikuliuojantys archetipai, didėle dalimi struktūruojantys muzikos kalbą apskritai. Nepaisant visų šiuolaikinės muzikos iššūkių (struktūralizmo, sonorizmo, garso sintezės ir kt.), nemažiau aktualūs šiandien ir melodinės linijos archetipai. Melodinės linijos archetipų tyrimai svarbūs jau vien dėl to, kad tai yra patikrintas tūkstantmetės tradicijos muzikos komunikavimo fenomenas – svairi pagalba ir ramstis dabarties muzikai.

Melodinės linijos archetipai – tai linijinės tonų slinkty, kurios gali skirtis detalėmis, bet nenukrypsta nuo pagrindinio modelio. Tokie modeliai – tarsi provaizdžiai: kaskart atsinaujindami, jie kartojasi visais laikais.

Pirminių melodinės linijos archetipų apraiškų galima rasti etnomuzikos paveldė. Tyrinėjant lietuvių etnomonodiją, išryškėjo keturi pastovūs archetipiniai melodinės linijos judėjimo modeliai:

1. Melodinės linijos užpildymo modelis. Šis archetipas užtikrina melodijos linijškumą priešpriešine siauru ar plačiu intervalų sąveika. Linijškumo intensyvumo tendencija, matyt, atsiranda veikiant pojūtinei sąmonei (pojūtinei klausos intuicija).
2. Apsupancios melodinės linijos modelis. Šiam archetipui būdingas linijos pusiausvyrumo palaikymas, orientuojantis į centrinę ašį. Linijos pusiausvyrumo paskata, regis, atliepia jausminę sąmonės funkciją (jausminė klausos intuicija).
3. Melodinės linijos atnaujinimo archetipas nukreiptas į linijos išbaigtumą. Savo kryptimis bei intervalais atsinaujinusi linija sukelia loginio tęsinio lūkestį. Todėl šis archetipas yra arčiausiai mąstančios sąmonės (mąstančioji klausos intuicija).
4. Pozicionuojantis archetipas inicijuoja virtualųjį (slaptąjį) linijškumą, išryškėjantį melodinių viršūnių kaitoje. Virtualusis linijškumas veikia plačiau nei realusis. Šis archetipas lemia linijinės tėkmės nuspėjamumą ir savaimingumą, todėl pastarąjį tikslinga sieti su intuityvios sąmonės modusu (prognostinė klausos intuicija).

Minėtieji melodinės linijos archetipai meniškai aktualizuojami XX a. melodikoje.

M. K. Čiurlionio melodikoje galima rasti visų melodinės linijos archetipų apraiškų. Archetipinius melodinės linijos modelius kompozitorius plėtoja vėlyvesiems romantikams būdingo derminio tonalumo ribose, plačiai kultivuodamas homofoninę ir polifoninę faktūrą. Melodika iš esmės yra pagrindinis meninės raiškos elementas, todėl net sudėtingiausiomis muzikiniu konteksto aplinkybėmis melodinės linijos reikšmė ir jos archetipinės raiškos formos visada lieka nepaliestos ir nepaneigtos. Ypač pažymėtinos šios melodinės linijos aktualizavimo priemonės: registriškai nutolę šuoliai (*užpildymas*), apsupamųjų garsų kreipimas į ašį (*apsupimas*), priešnamų krypčių išbaigimas finaliniu tonu arba pradinės intervalikos grąžinimas (*atnaujinimas*), virtualios linijos pozicijų išreiškimas harmonijos funkcijomis (*pozicionavimas*).

Meniškų archetipų pavyzdžių randame ir kitų XX a. kompozitorių melodikoje (Debussy, Ives, Bartók, Britten).

## Disjunct Intervals within Melody: Meanings and Functions through Schenkerian and Post-Schenkerian Theories

### Annotation

While considering melody as a general phenomenon, the focus on Schenkerian theory may seem odd for two reasons. Firstly, it is a theory of tonality, and the melodic parameter is only one part of the approach. Secondly, Heinrich Schenker “was an anti-modernist, especially ... with regard to music” (Schachter 2001: 7). Nevertheless, it can be argued that Schenker’s theory includes useful concepts for analysis, and his ideology is commonly considered “in no way an essential component of the analytic practice” (Schachter 2001: 16; see Meeùs 1993: 10). Moreover, Schenker’s principles, especially in English-speaking countries, have a growing importance among today’s scholars, and in the education of musicians. Thus, the main question of this paper is: What does the Schenkerian approach reveal about the disjunct interval within the melody?

I will present: 1) a brief history of melodic theory, which facilitates the understanding of Schenker’s role in that field; 2) a presentation of some books that are fundamental to the study; 3) a brief history of the spread of the Schenkerian theory, which helps clarify the relations between the mentioned books; and 4) a presentation of melodic characteristics, according to these theories before 5) concluding.

**Keywords:** melody, melodic analysis, Schenker, post-Schenker, melodic fluency, goal-directed motion, polyphonic melody, gap-fill.

### 1. Melodic Theory

#### 1.1. A Brief History of Melodic Theory

In their historical study *Melodielehre*, Abraham and Dahlhaus (1972: 11–12) pointed out that books on melody usually begin by noticing the absence of the theory of melody compared to theory of harmony. Indeed, the melodic phenomenon is generally considered as a question of artistic inspiration, rather than of composition technique.

The main way of analysing and interpreting the melodic phenomenon is still through phraseology. This formal point of view comes from theories developed during the 18th and 19th centuries, mainly by German-speaking authors, concerning the structure of the phrase, its articulations according to a hierarchy of sections fitting into each other, and the syntactic structure regarding contrast, repetition, variation, and development. These methods are based on motive, phrase, and harmonic cadences. Within this field, the first significant book is Heinrich Christoph Koch’s *Versuch einer Anleitung zur Composition* (1782). Koch was influenced by Joseph Riepel’s *Anfangsgründe zur musicalischen Setzkunst* (1754) and Johann Philipp Kirnberger’s *Allgemeine Theorie der schönen Künste* (1771–79) who wrote “the true goal of music – its proper enterprise – is melody. All the arts of harmony have as their ultimate purpose only beautiful melody” (quoted from Forte 1974/1962: 188). Koch influenced generations of theoreticians.

Turning to the 20th century, it becomes more obvious that analysis is a question of perspective and choice, and the approaches are diversified. On the one hand, the focus is given to specific melodic aspects, such as linearity (stepwise progressions; Kurth 1956/1917; Hindemith 1940/1937), contour (the general form of the phrase, and how melodic peaks manifest style; Jeppesen 1946/1927; Eitan 1997), and motive (considered as a seed, which generates the whole organic work; Réti 1951). On the other hand, new methodologies are based on new theoretical backgrounds such as semiotics (which leads to a paradigmatic and syntagmatic structuration; Ruwet 1972; Nattiez 1987), generative theories (Baroni and Jacobini 1978; Lerdahl and Jackendoff 1983), cognition (Meyer 1973; Narmour 1990, 1992), but also on statistics.

One of the most important questions raised is whether or not melody has to be defined as a pure succession of tones through time. Ernst Kurth, in his Bach study *Grundlagen des linearen Kontrapunkts* (1917) pointed out how motion and energy constitute the real melodic element. Even Leonard B. Meyer in *Explaining Music* (1973) criticizes the fact that melody is still described in a simple diachronicity, as an association of elements, without transmitting anything concerning its process. Thus, based on the idea of expectation, Meyer developed the concept of implication-realisation and identified a set of melodic patterns, including the gap-fill, axial and changing-note melody.

## 1.2. The Role of Schenkerian Theory Concerning Melodic Analysis

This question – about whether or not melody has to be defined as a pure succession of tones through time – is also dealt with by Schenker and he probably influenced Kurth, Meyer, and some theoreticians like Paul Hindemith. Regarding melody, Schenker’s main contributions are:

1. The synchronic presentation through layers (background, middle ground and foreground), which show the transformation of melodic lines over a broader strategy from a basic structure (strict counterpoint) to the surface structure (free composition).
2. Simplification and reduction, as well as generative principle.
3. Renewed hierarchic principle of structural and prolongational tones.
4. The notion of melodic fluency.
5. A set of configurations (such as unfolding, arpeggiation, reaching-over, linear progression, register transfer, coupling).

This kind of structural thinking is linked to embellishment manuals from the 16th century (Bent and Pople Web. 2015) in which tables of ornaments highlight how structural tones are decorated (that is, prolonged). It is unsure if Schenker knew about these, or about contemporary dissertations dealing with ornamentation (Arnold Schering, Robert Lach), but Schenker knew very well the work of Carl Philipp Emanuel Bach about the art of accompanying at the piano, and he himself wrote *Ein Beitrag zur Ornamentik* (1908).

## 2. Basic Presentation of the Study’s Fundamental Books

Firstly, this study is mainly based on Schenker’s trilogy, his so-called “magnum opus” *New Musical Theories and Fantasies: Harmonielehre* (1906), *Kontrapunkt* (Buch 1 1910; Buch 2 1922), and *Der freie Satz* (1935). Figure 1 (Heinrich Schenker’s *New Musical Theories and Fantasies*) sums up their English translations and main purposes.

	English translation	Purpose
Volume 1 <i>Harmonielehre</i> (1906)	<i>Harmony</i> (1954) Elisabeth Mann Borgese Oswald Jonas (edition)	It presents “ <b>the theory of scale degree</b> ” (without any added voice-leading theory) (see 1987: xxx)
Volume 2 <i>Kontrapunkt</i> , Buch 1 (1910), Buch 2 (1922)	<i>Counterpoint</i> (1987) John Rothgeb and Jürgen Thym	It explains “ <b>free composition</b> ” in relation to <b>strict counterpoint</b> . Schenker also discusses the counterpoint treatises by Fux, Albrechtsberger, Bellermann and Cherubini.
Volume 3 <i>Der freie Satz</i> (1935)	<i>Free Composition</i> (1979) Ernst Oster	It presents Schenker’s <b>theory of the Ursatz</b> .

Figure 1. Heinrich Schenker’s *New Musical Theories and Fantasies*

Secondly, this study is based on literature produced by the American Schenkerian teachers. Figure 2 (American textbooks introducing the Schenkerian approach) presents an overview of their textbooks.

1952	Salzer, Felix. <i>Structural Hearing</i> (New York)
1962	Forte, Allen. <i>Tonal Harmony in Concept and Practice</i> (New York)
1969	Salzer, Felix; Schachter, Carl. <i>Counterpoint in Composition</i> (New York)
1978	Aldwell, Edward; Schachter, Carl. <i>Harmony and Voice Leading</i> (New York)
1982	Forte, Allen; Gilbert, Steven E. <i>Introduction to Schenkerian Analysis</i> (New York)
1992	Neumeyer, David; Tepping, Susan. <i>A Guide To Schenkerian Analysis</i> (New Jersey)
1998	Cadwallader, Allen; Gagné, David. <i>Analysis of Tonal Music: A Schenkerian Approach</i> (New York)

Figure 2. American textbooks introducing the Schenkerian approach

Resembling in many ways the Schenkerian source, this literature reflects post-Schenkerian thinking. The following should be noted: 1) there is a somewhat regular production of about one published book per decade; 2) the books are mainly coauthored; 3) the last three works are introductions to Schenkerian theory, and 4) apart from the penultimate title, which is different in several senses, all these books were published in

New York, thereby illustrating that the history of post-Schenkerian theory in the USA is primarily a “New York phenomenon” (Girard 2007: 150).

Thirdly, this study is also partially based on literature currently used for courses in music theory, harmony/writing, and analysis (Gauldin 1997; Clendinning and Marvin 2011/2004; Laitz 2012/2004). As the Schenkerian approach is assimilated, this group of titles appears as an extension of the preceding group of books.

The relations and meanings of this collection of books are best understood through a historical overview of the spread and the evolution of the Schenkerian theory.

### 3. History: Schenkerian and Post-Schenkerian Theories

#### 3.1. Schenker, his Students in Vienna and his Theory in Europe

The Austrian city of Vienna was the cradle of the Schenkerian theory. Heinrich Schenker (1868–1935) was the teacher of four major figures: Hans Weisse (1892–1940), Felix Salzer (1904–1986), Oswald Jonas (1897–1978), and Moriz Violin (1879–1956). Figure 3 (Teaching relations: Schenker and his four main students) illustrates how they interacted in their roles as teachers and students (Schenker Documents Online Web. 2015; Berry 2003; Berry 2011; Koslovsky 2009). It is noteworthy that Salzer received his earliest Schenkerian education under Weisse while still a teenager – extremely early for that time period (Koslovsky 2009: 18).

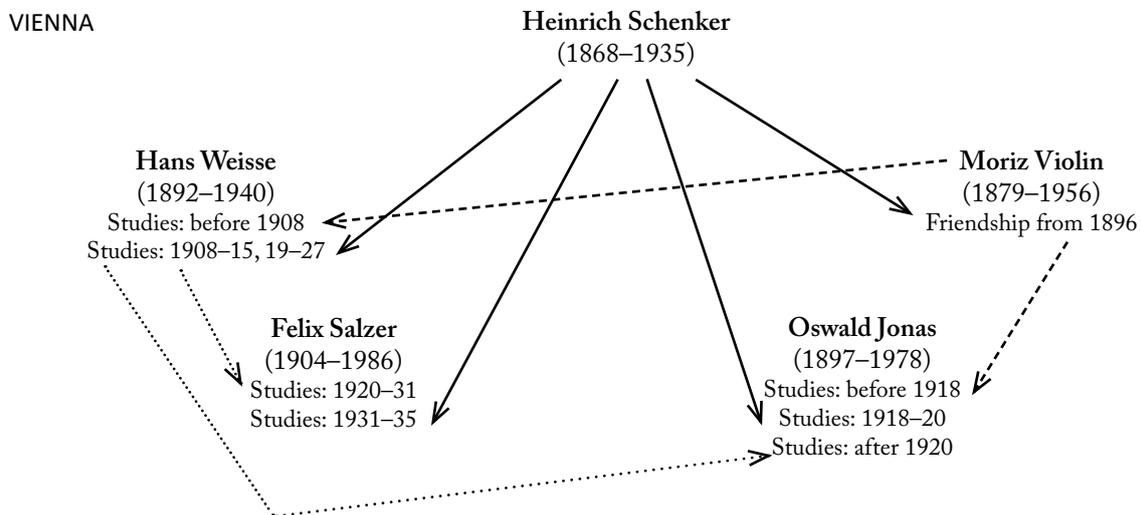


Figure 3. Teaching relations: Schenker and his four main students

The 1930s were a decisive period for the spread of Schenker’s theories for four main reasons: Firstly, a publication: after acceptance of Schenker, Jonas published in 1934 the now translated *Introduction to the Theory of Heinrich Schenker* (1982/1934). Secondly, the creation of institutes devoted to Schenker’s theory, the first being run by Violin in Hamburg and the second being opened by Salzer, Jonas and Violin in Vienna in 1935, after Schenker’s death (Koslovsky 2009: 38). Thirdly, an intensified Schenkerian education beyond Vienna, notably in Berlin. Jonas was the teacher of Ernst Oster (1908–1977), a forthcoming prominent figure (Koslovsky 2009: 38). Fourthly, Salzer and Jonas cofounded a journal, *Der Dreiklang: Monatschrift für Musik*, on which Oster also collaborated. The journal lasted for nine issues, until Salzer and Jonas disagreed about how to teach Schenker’s theory and what to publish in the journal (Koslovsky 2009: 40). As we will see, their differences influenced the spread of Schenkerian theories in the USA.

#### 3.2. Schenker’s Students and Theory in the USA

Due to the growing unrest in Europe, the 1930s became the decade when some of Schenker’s students emigrated to the USA. Weisse was the first to move already in 1931, and the others followed in the late 1930s. The arrival of Schenker’s students was timely, as American teachers were in need of “modernizing music education”, and were striving to make music theory “more academic” and a highly-specialized field (Girard 2007: 66, 136). Consequently, according to William Rothstein (1986), an “Americanization of Heinrich Schenker” was due to take place and was set to influence generations of musicians.

### 3.3. Network, Teaching, and Publishing in the USA

Figure 4 (Schenkerian approach in the USA) presents the main Schenkerian network in the USA and publication of textbooks and translations.

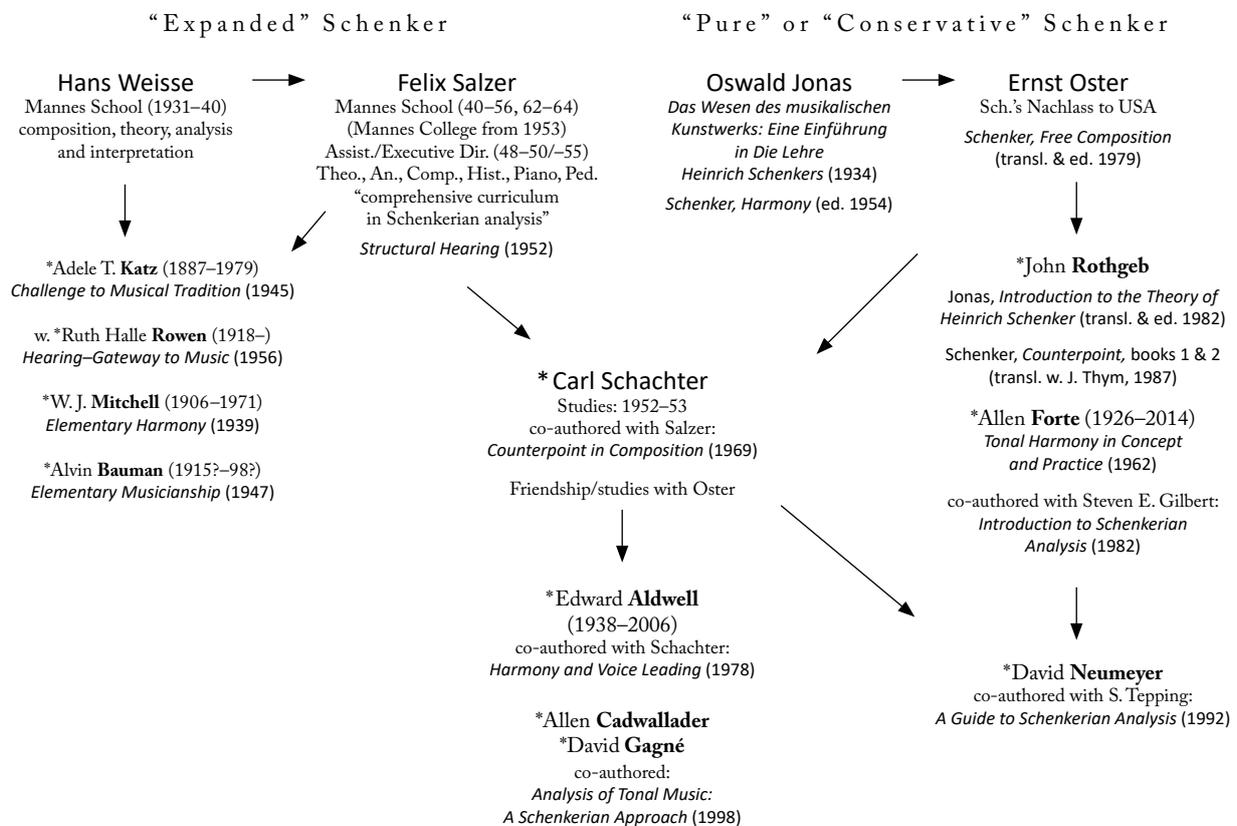


Figure 4. Schenkerian approach in the USA

Weisse was an influential teacher and his heritage may be found in his students’ texts. Adele T. Katz (1887–1979) was the first person to write and publish in English about Schenker’s theory, particularly in her book *Challenge to Musical Tradition: A New Concept of Tonality* (1945). She dedicated her work posthumously to Weisse and thanked Salzer (Katz 1945: vii) for his “provocative points of view” and “stimulating discussions of problems”. Her book presents Schenker’s main ideas (especially that “tonality is the expression of one and only one key”), as well as a study of works from Bach to Debussy and Stravinsky.

After Weisse’s death, Salzer taught at Mannes school where he instituted “a comprehensive curriculum in Schenkerian analysis” (Girard 2007: 123), which forms the basis of his book *Structural Hearing*. This is the first textbook which introduces Schenkerian principles in a pedagogical manner. As the standard book on Schenker, *Structural Hearing* was very influential up until the 1970s and “the rise of Schenkerian American education” took place before Schenker was translated into English. Allen Forte (2006: 83) considers Salzer as “the pivotal figure in the history of music theory . . . , [and the] founder of modern-day musicology”.

Salzer distances himself from Schenker mainly by applying the method to an expanded pre- and post-tonal repertoire. This expansion contributed to raising interest in Schenker, but it was also strongly criticized, initially by Jonas. When Jonas edited the English translation of Schenker’s *Harmonielehre* (1906) in 1954, he directly decried Salzer, because of his “misinterpretation of Schenker’s basic theories” (Schenker 1954/1906: viii fn). Accordingly, two streams developed, although not completely watertight: the “expanded” Schenker, basically based on Salzer’s book, and the more “pure” or “conservative” variant, based on the translations of Schenker’s books. Oster was influential thanks to his 1979 translation of *Der freie Satz* (1935) and he taught major figures, who then translated and wrote textbooks on this theory. It is worth noticing that the “more conservative” side appears among those who studied the least (or not at all) with Schenker.

Carl Schachter, nowadays considered as the most prominent Schenkerian specialist in the USA, was one of Salzer's students. They coauthored *Counterpoint in Composition* (1969), directly based on Schenker's *Kontrapunkt*. Together with his own student, Edward Aldwell (1938–2006), Schachter coauthored another influential book, *Harmony and Voice Leading* (2011/1978), which whilst not being a textbook is nevertheless imbued with the Schenkerian approach. All the other books (see Fig. 4) are textbooks on Schenkerian analysis. David Neumeier and Susan Tepping's starting point is noticeably different since their approach is "generative" rather than reductive, which they claim is closer to "Schenker's own insistence on analysis as re-tracing the path of the composing-out process" (Neumeier and Tepping 1992: vi).

#### 4. Melody and Intervals, According to these Theories

##### 4.1. Intervals

Just as Schenker disapproved when people only looked at "isolated details" (Schachter 2001: 11; Diary 1933), Forte wrote: "The primary aim of serious music study is to illuminate the subject, not to surround it with trivia and bury it beneath detail. [But] one must realize that a technical approach to music ... involves specific tasks that are often detailed" (Forte 1974/1962: 1–2). This also applies to intervals. Beyond entities, their real meaning is given through functions in larger perspectives.

In *Counterpoint*, Schenker presents an important discussion about melodic intervals. The first book comprises two main parts: the first part concerns the Cantus Firmus – "in general" (1987/1910: 17–32), "in particular" (1987/1910: 33–109) – and the second part addresses the two-voice counterpoint – first species (c 60 pages), second species (50 pages), third (30 pages), fourth (50 pages), and fifth species (40 pages). The main body of the first section and of the book (about 90 pages) is dedicated to melodic intervals. Schenker discusses the arguments of the treatises of Fux, Albrechtsberger, Bellermand and Cherubini concerning the qualities of the intervals (consonance, dissonance) and their combination rules (such as leaps balanced by steps, and the way of approaching and leaving a climax). The main focus is on the art of joining consecutive intervals into a Cantus Firmus; as soon as the text turns to polyphony, the observations become harmonic. Schenker's significant discussion about the melodic intervals is not taken up again. His followers only recall the main rules in practical terms while Schenker goes further and gives increased meaning to interval.

##### 4.2. Melodic Fluency

*Fließender Gesang*, translated as "melodic fluency", is Schenker's most significant contribution concerning melody. Schenker means in the first book of *Counterpoint* (1987/1910: 94), that this notion refers to "a kind of wave-like melodic line" in which successions of large leaps are avoided. Melodic fluency is therefore governed by stepwise motion. Two kinds of stepwise motions, at different structural levels, make the melody fluent. The first kind is stressed for instance by Cadwallader and Gagné (2007/1998). They state that "Schenker used the term melodic fluency to describe the balance and poise that a stepwise line can provide" (Cadwallader and Gagné 2007/1998: 17) resulting concretely in the balance of steps and leaps, mainly in the foreground. The second kind is probably most clearly formulated by Laitz (2012/2004), who comes closer to the Schenkerian meaning. He defines melodic fluency as "step motions, occurring below the embellished surface of a melody" (Laitz 2012/2004: 95–96), that is on the middle ground and background.

This requires a solid, hierarchical understanding of the intervals. This kind of deep ear training is, according to Schenker, provided by counterpoint. Moreover, according to Salzer (1962/1952: 51), a serious education in counterpoint "represents the most basic preparation for understanding and devising directed musical motion".

##### 4.3. The Goal-Directed Motion

Through Salzer, the directed musical motion appears as the essential Schenkerian principle. Salzer's lecture from 1949 is entitled "Directed Motion: The Basic Factor of Musical Coherence" (Koslovsky 2009: 313), and his book, *Structural Hearing*, exposes "Music as directed motion", and "Musical direction as an organizing force" (Salzer 1962/1952: ix, 11–14, 37–51). As music has to be grasped through its motion, Salzer formulates the following questions: "Where does the motion begin? What is its goal? How does the composer reach that goal?" (Salzer 1962/1952: 11). Thus, depending upon the goal and the direction of the motion, tones and chords get specific functions. That is why "Structural Hearing" is the name given by Salzer to the way of hearing and understanding musical motion, as brought to light primarily by Schenker, and consequently concerns the relationship between strict counterpoint and free composition.

The idea of motion related to music is very old. In ancient Greece, music was described as motion or movement. During the 20th century, it became common to read about musical motion in similar ways as did Jan LaRue in his *Guidelines* (1992/1970: 1), namely “Music is essentially movement; it is never wholly static”. The Gestalt psychology contributed to defining this notion in more accurate terms. Notably, Kurth’s *Grundlagen des linearen Kontrapunkts* begins with the famous phrase: “Melodie ist Bewegung” (Melody is motion) (Kurth 1956/1917: 1), the musical motion being carried on by the horizontal dimension.

What is new with Schenker is that he thinks in terms of “directed motion”, and especially of “goal-directed motion”. Two sources may have influenced Schenker to specify this. Firstly, August Halm, who wrote in his *Harmonielehre* (1900), that “Music is ... life and motion – certainly *motion* which *leads* to rest ...” (quoted from Wason 1985/1982: 121, my emphasis). Secondly, Abbé Georg Joseph Vogler defined in his *Harmonielehre* (1802) the “tonal direction” as “the result of an [aural] impression, effected gradually through harmony [that is the theory of cadences]” (quoted from Wason 1985/1982: 15). These ideas (directed motion and tonal direction) together with the idea of motion carried on by the melodic dimension appear concentrated in the theory of Schenker.

Moreover, motion is best realised through counterpoint (and not through a static progression from chord to chord). The essence of the goal-directed motion is therefore to be found in the *Ursatz* (see Figure 5: *Ursatz*), which is a condensed contrapuntal phrase because it shows the most direct and the shortest way to the goal, representing the “structural motion of an entire composition” (quoted from Salzer’s 1949 lecture in Koslovsky 2009: 313). Thus, the *Urlinie* (the descending stepwise motion) represents the ultimate expression of both the goal-directed motion and the melodic fluency.

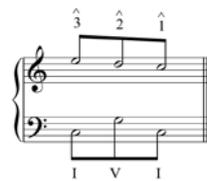


Figure 5. *Ursatz*

In later books the idea of goal-directed motion is raised, albeit not as strongly as Salzer.

It appears even slightly different, and is gradually less stressed. For instance, Aldwell and Schachter (2011/1978: 8) remark that music’s “ability to suggest *motion* is one of its “mysterious powers”. In the first edition of this book, the guiding question is “*who* is the goal in the music?” (not the “*what*” of Salzer), and the concrete answer is the tonic, which appears to form both “the point of departure from which the other tones move and the goal to which they are directed” (Aldwell and Schachter 2011/1978: 5). Gauldin (1997: 34) writes further: “Tonal melodies represent goal-oriented or directed motion that is continually moving *toward* or *away* from certain tonal, rhythmic, and formal destinations.” Accordingly, following Aldwell and Schachter, Gauldin puts certain emphasis on the two directions: not only where the melodic motion is going, which is the typical Schenkerian thinking, but also where the melody comes from.

Finally, Cadwallader and Gagné (2007/1998: 19) introduce such ideas periodically throughout the analyses, through phrases such as “... the arrival on the tonic ... create[s] a definitive goal of the melodic motion”, but mainly through a quote from Schenker’s *Free Composition* (1979/1935: 5): “the *goal* [path] and the course of the goal are primary. Content comes afterwards: without a goal there can be no content”. This is also what Laitz suggests, when he writes that “melodic fluency refers to *underlying scalar patterns* that support the infinite variety of melodic embellishments that lie on the music’s surface” (Laitz 2012/2004: 95–96).

#### 4.4. Unfolding

The intervals, as well as the previously discussed concepts (melodic fluency, goal-directed motion and *Ursatz*) are all related to the concept of unfolding. Schenker calls this *Auskomponierung* and he explains it in his *Harmonielehre* (1906). Unfolding is directly connected to space and time, in which the basic musical material (the triad) unfolds. As Jonas formulates it (Schenker 1954/1906: xvi): “the chord has a dimension in space; and the nature of music, which flows in time, demands its translation into a temporal sequence”, that is the unfolding. Concretely, Katz (1945: 19) clarifies that “the intervals are horizontal instead of leaving them in a vertical position”. The first principle of the unfolding and prolongation is thereby the arpeggiation. However, according to Jonas (1982/1934: 51), “the arpeggiation ... remains a harmonic event ... [but this is] the necessary prerequisite for the orientation of the ear.” This is only when the disjunct interval (as a *harmonic* event) is *filled in* and “enriched” by a passing note (as a contrapuntal device and a *melodic* event) that the disjunct interval becomes a melodic line. That is why the concept of the *Ursatz* highlights the balance of the musical verticality and horizontality. The *Urlinie* is the first passing-tone motion and the first melodic line, and it embodies the introduction of the horizontal aspect in the theory of Schenker.

This unfolding of the triad produces consonant skips, called “tonal spaces”, which according to Schenker, can only be 1–3, 3–5, 5–8 (Schenker 1996/1926: 195). As the passing-tone motion constitutes the main way of filling in the tonal spaces, this leads to the linear progression (*Zug*). Cadwallader and Gagné (2007/1998: 73)

notice that the German term *Zug* suggests the “idea of pulling or drawing”, which is “something dynamic, a motion directed toward a goal”.

#### 4.5. Active and Stable Tones

Closely related to this is the notion of active and stable tones, which became influential through Aldwell and Schachter (2011/1978)<sup>1</sup>.

As shown by Jonas (1982/1934) and Aldwell and Schachter (2011/1978), the function of the tones depends primarily on their scale degree, and is directly connected to Schenker’s unfolding as well as to his own representation of the tonal spaces. We thus have a tonic triad: the first, third and fifth degrees are stable, while all the others are active and move stepwise in the direction of the stable degrees. This stems from Schenker who, according to Snarrenberg (Web. 2015), takes “the concept of triadic consonance as axiomatic”, and the dissonance has “an ineluctable need for resolution into consonance”. In later literature, Gauldin (1997: 35) even calls the stable degrees “inactive”, and he specifies that “as we begin to look beneath the rhythmic and melodic surface of the music to reveal the underlying tonal framework on which the melody is based, we will discover longer-range stepwise tendencies of that framework that do support these generalizations.”

#### 4.6. Polyphonic Melody

In *Ein Beitrag zur Ornamentik* (1908: 9), Schenker quoted C.P.E. Bach (see Figure 6: Arpeggiated chord and polyphonic melody), and commented that it is possible to hold together the notes of an arpeggiated chord. This score strikingly highlights three voices, which enter one after the other. In this way the unfolding of the triad makes possible a new dimension: the polyphonic, which means that one single melodic line consists of several combined voices and the reverse (distinct voices are incorporated into a single melodic line).



Figure 6. Arpeggiated chord and polyphonic melody (Schenker 1908: 9)

While explaining this phenomenon, Salzer (1962/1952: 121) first distinguishes a “polyphonic manifestation” within the melodic line, before calling the result a polyphonic melody. Aldwell and Schachter (2011/1978: 374) mention it without insistence, and Cadwallader and Gagné (2007/1998: 21) present one of the clearest definitions, namely: “A melody that articulates two or more distinct voices ... is called a polyphonic melody”. Following Salzer, his students also use the term polyphonic melody, while all the others (Forte, Forte and Gilbert, Gauldin, Laitz, Clendinning and Marvin) use a synonym – compound melody<sup>2</sup>.

The following example will highlight this Schenkerian concept; see Figure 7: Bach, Fugue in E-flat minor BWV 853b, subject (Schenker 1979/1935: Ex. 109e.5).



Figure 7. Bach, Fugue BWV 853b, subject (Schenker 1979/1935: Ex. 109e.5)

Schenker hears that the fifth E flat – B flat initiates the contrapuntal unfolding of the tonic chord from E flat (in the tenor voice), to B flat (in the soprano voice). The conjunct gesture of the first two bars constitutes a diminution, which interconnects the voices, from the soprano down to the alto on G flat, and back up to the soprano on B flat. As B flat is prolonged and implicitly held, it gets a dashed line.

<sup>1</sup> William J. Mitchell (one of Weisse’s students) is the first to use such terminology in his *Elementary Harmony* (1939). Salzer does not, but he does however warmly recommend Mitchell. Aldwell and Schachter (1978) refer to him in the preface. Mitchell makes no particular mention of musical motion, but he makes a structural distinction between the “principal tones”, whose function is to “guide melodic activity”, and the “dependent tones”, whose function is to “decorate”.

<sup>2</sup> Another synonym, “melodic fission” is used within music cognition.

#### 4.7. Gap-Fill

According to Meyer, the subject of Bach's Fugue BWV 853b (here in D-sharp minor) is a typical gap-fill melody, see Figure 8 (Meyer 1973: 103). Meyer states concisely that "a structural gap occurs where something is felt to be left out" (Meyer 1956: 130) and such a gap needs to be completed and filled in.



Figure 8. Bach, Fugue BWV 853b, subject (Meyer 1973: 103)

The notion of gap-fill is Meyerian, and while it was influenced by Schenkerian theory, it has also contributed to enriching the Schenkerian language. All the above-mentioned post-Schenkerian books include something about the fill-in function of the passing tone within a space, beginning with Katz (1945: 16–17) who wrote about the "space filler", then Salzer (1962/1952: 118, 123) on how created spaces have to be "filled in" and about the "interval-filling type of motion". According to Salzer and Schachter (1969: 6), "the continuation in the opposite direction "fills in" the leap and helps integrate it into the line as a whole".

This view is repeated in later books, including works by Forte and Gilbert, Cadwallader and Gagné, and Laitz. However the notion of gap-fill itself is connected to Meyer. Especially, Cadwallader and Gagné mention gap-fill and suggest the influence of Meyer, particularly through the following definition: "The specific procedure of filling in a leap is called gap-fill, another Gestalt principle that is predicated on the listener's expectation that a melodic leap will eventually be filled in by stepwise motion in the opposite direction" (Cadwallader and Gagné 2007/1998: 97).

#### 5. Conclusion and Questions

To summarize, within the studied Schenkerian and post-Schenkerian approaches, the disjunct interval takes specific functions and meanings, which are related to the concepts of unfolding, polyphonic melody, melodic fluency, structural and prolongational tones, and goal-directed motion. The nuances in definitions and differences in vocabulary are connected to the presented history of Schenkerianism in the USA. Focus was given to the tonal melody, but Schenkerian concepts may even be applied to non-tonal music. The analytical concepts allow for synthetic and general conclusions (Favrot 2004: 44), but they may also be tools for composers to reflect on the creative work and to find renewed ways of creating music – depending on the kind of desired melodic continuity.

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## **Melodija su intervaliniais šuoliais: reikšmės ir funkcijos per šenkerinės ir pošenkerinės analizės teorijų prizmę**

### **Santrauka**

Norint sukurti melodiją neužtenka vien skonio ir stiliaus pojūčio, tam taip pat reikia nutuokti apie sintaksę bei funkciją. Intervaliniai šuoliai melodinėse struktūrose gali atlikti skirtingas funkcijas ir įgyti skirtingas reikšmes. Pagrindinis šio straipsnio tikslas – apžvelgti, kas apie intervalinį šuolį melodijoje teigiama Heinricho Schenkerio analizėje ir jai veikiant susiformavusiose vėlesnėse teorijose. Šios žinios gali pasitarnauti atnaujinant kompozitorių muzikinę kalbą ir požiūrį į melodijos fenomeną.

Straipsnio pradžioje pateikiama glausta melodijos teorijos istorija – kaip ji evoliucionavo nuo XVIII a. sukurtos ir iki šiol vartojamos terminijos iki XX a. atsiradusių naujų įžvalgų ir įvairių analitinių metodų. Pagrindinis visose šiose teorijose keliamas klausimas, kurį aptaria ir Heinrichas Schenkeris, – ar melodiją pakanka apibrėžti vien kaip laikę išdėstytų tonų seką. Apžvalgoje atskleidžiamas Schenkerio teorijos vaidmuo ir indėlis į melodijos reiškinio supratimą.

Straipsnyje trumpai aptariama Schenkerio teorijos sklaida JAV, siekiant atskleisti sąsajas tarp svarbiausių muzikos analizės vadovėlių ir jų autorių. Tarp pastarųjų galima aptikti ne vieną buvusį Schenkerio studentą (visų pirma minėtini Felixas Salzeris ir Oswaldas Jonas) bei jų studentus (dažniausiai minimi Ernstas Osteris ir Carlos Schachteris). Schemoje vaizduojamas Schenkerio teorijos paplitimas JAV iki šių dienų. Šioje straipsnio dalyje taip pat apžvelgiama muzikos teorijos studijose naudojama literatūra, akivaizdžiai adaptavusi iš Schenkerio perimtus metodus.

Apžvelgus istorinį ir teorinį kontekstą, toliau nagrinėjamos melodijos ypatybės, kaip jas apibrėžė Schenkeris ir ryškiausi jo sekėjai, taip pat tai, kaip minimi autoriai aptaria intervalų vartoseną ir jos apribojimus. Pateikiami specifinių Schenkerio sąvokų (melodinis sklandumas, kryptingas judėjimas, iškomponavimas) apibrėžimai ir tolesnė jų plėtotė. Parodoma, kaip šios trys sąvokos susijusios tarpusavyje ir koks vaidmuo jose tenka laipsniškam judėjimui bei intervaliniams šuoliams. Galiausiai apžvelgiama pošenkerinės terminijos plėtotė, ypatingą dėmesį skiriant aktyviems ir stabiliems tonams, polifoninei melodijai ir specifiniam šuolio užpildymo atvejui.

Straipsnyje pateikiama sąvokų ir koncepcijų evoliucija nuo Schenkerio ir pirmųjų pošenkerinės analizės teoretikų iki Leonardo B. Meyerio, kuris savo ruožtu padarė įtaką vėlesniems pošenkerinės analizės teoretikams. Ši raida iliustruojama Johanno Sebastiano Bacho fugos temos analize.

Straipsnio tikslas – pasiūlyti kompozitoriams įrankių apmąstyti melodijos fenomeną ir atrasti naujus komponavimo būdus.

## Melody and Intonation

### Annotation

The musicological concept of a melody, at all its capacity and self-sufficiency, is closely connected with another key concept – intonation. Analyzing intonation, we often mean only a melody, without taking into consideration other layers of the texture and by that substituting one concept for another. The analysis of the above mentioned concepts shows that self-sufficient concepts of melody and intonation are like as carriers of the semantics. In this case, the melody accents the semantic nuances important for intonation. Only in cases, when we tell about expressive one-voiced motive or the phrase (for example, in some rhetorical figures) they almost coincide.

**Keywords:** melody, intonation, concept, musical content, Boris Asafyev.

### Introduction

The concept of melody in musicology, despite its weightiness and self-containment, is closely linked with another key concept, intonation. This link can be readily observed in the customary practice of musicians displaying the ease of transition from one to the other. When analysing intonation, we quite often actually signify just melody, not taking into account other layers of texture and by doing so we substitute one concept for another. Subsuming intonation under melody is quite characteristic of musicians who think linearly, such as vocalists and string and wind instruments musicians.

However, this convergence and substitution of concepts is observed not only in the customary practice of musicians. Scientific thought sometimes does the same. In the works of Viktor Belyy, Viktor Vanslov, Alexey Ogolevets, Vera Vassina-Grossman, Michail Karpychyev, Evgeny Nazaykinsky, Arnold Sokhor, Ninel Shakhnazarova, and partly Boris Asafyev this interpretation of intonation as a fragment of melody is present. For example, Mark Aranovsky writes: "... melody is unfolding in time and perceived as a line a sequence of united with intonational coupled tones, having the unity of the structure and content" (Арановский 1969: 37). It is relevant here to remember that Boleslav Yavorsky made a contribution of his own to the formulation of the "melodic" concept of intonation by defining intonation on the basis of the modal rhythm theory as the smallest melodic-structural unit of the sound flow representing "the juxtaposition of two sounds (or moments) of the tritone system" (Яворский 1908: 4) that differ in gravitation while intoning as "the principle of realising musical sound by means of intonation" (Яворский 1929: 23).

The above considerations already drive the inquisitive musicologist to question the boundaries of these concepts, their nature and whether it is appropriate to compare and substitute one for the other. To examine these issues, we can take as a point of departure the scientific positions currently held in studies relating to each concept.

### Concepts "melody" and "intonation" in musicology

The original definitions of these concepts should be determined. Melody was the subject of a serious study in musicological literature in the works of Carl Dahlhaus, Liudmila Dyachkova, Arthur C. Edwards, Karel Janeček, Yury Kholopov, Valentina Kholopova, Dobri Khristov, Leo Mazel, Michail Papush, Hugo Riemann, Bence Szabolcsi, Yury Tiulin, Ernst Toch, and other researchers. The authors variously formulated the interpretation of melody. The spread of variants is, nevertheless, limited allowing the following generalisation after Kholopov: melody is a horizontal-linear succession of sounds that forms a whole; the dominant voice in homophonic many-voiced texture; a figurative and semantic unity (Холопов 1976: 550–557).

Intonation, too, was the subject of a number of fundamental studies (Asafyev, Vassina-Grossman, Nina Gerasimova-Persidskaya, Yaroslav Jiranék, Vyacheslav Medushevsky, Liudmila Shaymukhametova, Arnold Sochor, etc.) as well as specialised music dictionaries and references<sup>1</sup>, including online publications and the information resources. These resources interpret intonation in various ways. Musical intonation is:

- the opening phrase of a melodic composition (Gregorian chant), sung solo;
- a fragment of melody ("rising intonation", "descending intonation", "circling intonation", "jump like intonation");
- a brief organ prelude, intended to establish the tonality of liturgical Gregorian chants as well as entry into vocal or instrumental piece of music until the middle of the 18th century like *Intrada* (in Andrea and Giovanni Gabrieli's collection of intonations published in the 16th century);

<sup>1</sup> See Apel 1969; Kennedy, Kennedy, Rutherford-Johnson 2013; Sadie 2001; Thompson, Bohle 1975; Римап 2004; *Музыкальный словарь Гроува* 2001; Сохор 1974; Холопов 1976.

- the ability to produce musical tones, play or sing a melody, articulate and pronounce out loud;
- the universal foundation of music without which music does not exist. Asafyev considers: music is a completely intonational art, and not a sound art; “the art of intoned meaning” (Асафьев 1971: 344); “an idea to be expressed with sound becomes intonation” (Асафьев 1971: 211);
- “the meaningful development of musical communication, the materialisation ... of thinking in culture”, as Isaly Zemtsovsky maintains (Земцовский 1996: 99);
- the generalised perception of the represented world of the work. Yuly Kremlev: intonation is “the nucleus of image” (Кремлев 1976: 68). Medushevsky: “generalising intonation” (or “general intonation”) is the work’s overall intonational coverage from this point of view (Медушевский 1980: 178–194). It can be said that Tchaikovsky’s “Autumn Song” from “The Seasons” embodies a melancholic intonation, and of course terms like lyrical, tragic and other intonations of the whole work are unavoidable);
- “the unity of expressiveness-meaning existing in non-verbal sound embodiment, functioning with the participation of musical experience and non-musical associations” – this definition of intonation gives Valentina Kholopova (Холопова 2014: 131);
- the brief semantic element of music; analysts-practitioners often equate it with a motif or phrase (“lamento-intonation”, “invocatory intonation”, “interrogative intonation”);
- separated and filled with semantics interval (“the second’s intonation”, “the sixth’s intonation”, “the fourth’s intonation”).

Among the above interpretation, semantically cultural approach to intonation by Asafyev draws our attention. This outstanding scholar was not a supporter of a once-and-for-all given axiom. Polished by him, term, movement and evolution of his thoughts imprinted in quite different statements about intonation<sup>2</sup>. It becomes clear that a number of interpretations of intonation starting from the numerous declarations of Asafyev and, particularly, intensively conceptualised by Russian musicology, point to the semantic origins of intonation.

Here is the picture formed from the sphere of performers:

- the correct or exact loudness of sounds and intervals, which is relevant for musicians singing or playing instruments with non-fixed loudness. Here, Nikolay Garbuzov’s interpretation of intonation as a nuance inside the zone of loudness of musical tone fits well (Гарбузов 1948);
- the ability to generate musical tones, to play or sing a melody, to articulate, to say out loud, or – according to Aranovsky – “the means of pronouncing the musical sound” (Арановский 1984: 83);
- “*the meaningful sounding*, and not a mere statement of deviation from the norm (clean or not clean presentation of sound)” according to Asafyev (Асафьев 1971: 198); in a contrary case, we can say that the performer is producing sounds and not intoning music. Thereby, the field of performance adds such interpretations of the concept that can serve as criteria for the quality of performing including the essentially semantic fullness of sound.

Proceeding from a universal semantic component of intonation in its different interpretations, it can be rightfully defined it as *the smallest image-sense element of music*. In this definition, the basic signs place intonation in the content area of music of determined dimensions: it is a *small (brief)* unit.

Now we shall try to compare the two concepts according to a series of parameters.

### Comparison of melody and intonation

**Facture formation.** The main feature of melody is monophony and it is a matter of principle that applies to both monophony and many-voiced texture. For intonation, monophony is only a possible type, usually in monophony material. In many-voiced texture, intonation covers all the set of expressive elements according to Jaroslav Jiránek, Mazel, Sergey Skrebkov, Antonín Sychra<sup>3</sup>. As Medushevsky rightly noted, “not one of the phenomena of the analytical organisation of music (interval, mode, chord, rhythm, etc. – *L. K.*) can be equated with intonation, but each one of them becomes an aspect of intonational form...” (Медушевский 1985: 67). This statement does not exclude the possibility that any one component is able, depending on the level of its artistic value, to prevail over the others without excluding them. Melody can find itself playing this role (in a neutral background accompaniment in monophony), harmony (what can be referred to as “named” harmony) etc. Proceeding from here, derivatives such as “timbre-intonation” (Sergey Slonimsky), “harmonic intonation”

<sup>2</sup> It should be added that the interpretation in English literature of the term by Asafyev is occasionally denoted graphically as *intonazia* or *intonatsia*.

<sup>3</sup> The special situation is formed in polyphony, where can be combined several intonations simultaneously (in development, reprise, code of multi-subject fugue, in exposition of multi-subject fugue with simultaneously demonstration of subjects).

(Kremlev), “rhythm intonation” and “intonation of dynamics and articulation” (Kholopov) and others become possible.

**Sound formation.** If there is a melody in the form of fixed structural and reproduced it, and only it, the intonation as a semantic unit lives in the variability of its manifold forms of sound. In contrast to the constancy of melody, intonation in the audio-integrative relation is variably. That is why Asafyev’s idea about “intonation dictionary” of a musical culture (Асафьев 1971) finds no further concrete specification. It is not possible to draw such “dictionary” because the “words” of the dictionaries have no single sound shape and are virtual.

**Dimension.** Melody can already be formed by a couple of sounds, declares Yury Tiulin (Тюлин 1939: 19), but it requires duration. It is in the linear flow of thought, in the divisions in time that essence of melody or “melos” is revealed (Asafyev’s “melos” refers to the linear-time flow of energy, the flowing of one sound into another. In contrast with melody, intonation is laconic, rolled, formulary, lapidary. By varying its sound form, it can cover greater time fragments (up to an entire musical composition) and thereby gain the status of “generalising” intonation (according to Medushevsky).

**Structuring.** From the point of view of composition, melody is characterised by its containment of cadences and its structure made of motifs, phrases, sentences and other structural units. In intonation, all of this becomes impossible, as intonation is firstly a laconic element. Its structural equivalent can be a motif, phrase or even one consonance (the opening two chords of Beethoven’s “Eroica”, the tonic triad of the high-pitched strings and woodwinds in the prelude of Wagner’s “Lohengrin”) or a single sound (first powerful tutti “F” of Beethoven’s “Egmont”, similar “B” at the beginning of Borodin’s Symphony No. 2). Secondly, the intonation of sound (from the point of view of playing) is variable, “polymorphous”: the same intonation can actually be structurally formed differently (in Tchaikovsky’s “Barcarolle” from “The Seasons”, the intonation of melancholic meditation appears in one-measure motifs in the accompaniment, then two-measure phrases in the enriched bulging melodic wave, further in four half-measure sequential-imitative motifs with the relief melody etc.).

Polymorphism (from the Greek: *polymorphous* – multiform) of intonation means not only a multi-variant form of its sound, but also the difficulty and even the impossibility for her single, formular meaning. In many structural variants, the semantic nucleus of intonation is constantly enriched with a variety of semitones and shades, which are in the game and embody its natural life in a musical composition.

**Artistic expressiveness.** Melody is capable of being quite expressive, for instance, in lyrical songs. Its expressive potential is conditioned on the unity of the multitude of simple means of musical expressiveness, covered by melody as a complex technique (meter, rhythm, mode, tonality, tempo, register, timbre, etc.).

The main function of intonation is to convey meaning. All its other features serve this function. High semantic concentration leads to semantic generalisation and typification – the existence in culture of typical intonation formulas (question, exclamation, lament, rhetorical figures, etc.), “migrating intonational formulas”. This concept is developed by Liudmila Shaymukhametova, who believes that “migrating intonational formula” is “the steady turn (idiom) of intonation, which is separated from the particular text and migrating from text to text, saves the invariant properties of the structure and semantics” (Шаймухаметова 1999: 15).

Different values of the expressive quality of melody and intonation in a musical composition are discovered when using inertial general forms of movement (scales, arpeggio and other passages). For melody they are disastrous (decrease the aesthetic attractiveness, meaningfulness of modal-linear relations); whereas in intonation they reveal and actualise some other specific meanings, for example the great joy and delight from perfect music playing in fast passages. Therefore, the expressive potential of melody is in principle great, but melody lacks the ambition to accumulate all expressiveness (sometimes quite hastily and tendentiously voiced in judgments of melody).

**Place in the structure of musical content.** Expressiveness allows including both melody and intonation in the structure of musical content. This structure like all abstraction is conventional and schematic enough, covering elements of different qualities and functions, forming a *system*. The majority of elements of musical content relate to one another in this system as levels of hierarchy: the tiniest – *tone* – unit of musical work has both physical (acoustic) and expressive characteristics. On the basis of the expressiveness of tone, *musical intonation* is born as the smallest relatively delimited and self-contained semantic element of music. The intonational process (variation and interaction between musical intonations) outlines the specific contours of *musical image*. The relationship between musical images resolves some artistic *theme (topic)*. In turn, the theme disclosing under this or that point of view crystallises the closely related artistic *idea* of the work.

This is how the following hierarchical “bunch” of elements of the content of musical composition is structured (Chart 1)<sup>4</sup>.

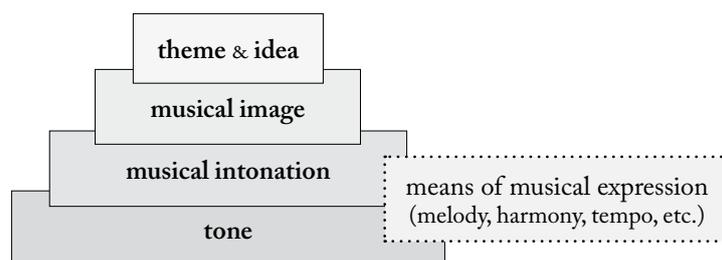


Chart 1. Structure of the musical content

In the above “coupling” of elements, “the nested doll effect” is at play where tiny elements are part of a bigger element, the bigger elements pour into an even bigger one, etc. Yet, besides the hierarchical linked elements, musical content includes other components. The intermediate place between the components of the two of the lower levels of hierarchy are occupied by *the means of musical expressiveness* or elements of music, which include melody, rhythm, meter, tempo, timbre, dynamics, mode, tonality, etc. They characterise tone on the one hand, and partly shape musical intonation on the other.

It turns out that in the structure of musical content, musical intonation solidly occupies its place as one of the main elements, while melody occupies the intermediate position between tone and intonation.

**Value in a musical composition.** In the spectrum of means of musical expressiveness, it is customary to give melody preference. Its priority was undeniable in the 18th–19th centuries. However, in the 20th century the situation started to change, and there was a transformation of the expressive techniques system. Rhythm, timbre, dynamics started occupying the foreground. Melody lost its former priority in the implicit “table of ranks” and conceded its leading role to other components of musical texture. Intonation is as mobile in value in context, existing in great historical periods and conceding its position in some stylistic currents of contemporary music (in long vibrating sonorous clusters, for instance).

**Designation of the genre.** Here melody and intonation are quite distanced. Melody is the genre that demonstrates the triumph of vocalising and an undeniable authority of total melodism in a vocal or instrumental piece (“Melodies” of Edvard Grieg, Felix Mendelssohn, Sergey Rachmaninoff, Anton Rubinstein, Tchaikovsky, and other composers), whereas intonation is the opening instrumental segment of a Gregorian chant or an organ prelude to a choral piece (in Andrea and Giovanni Gabrieli’s work) and as a genre denomination it existed only in early music. Thereby, we can form the following picture (Chart 2):

	Melody	Intonation
Texture formation	Monophonic line	Variable
Sound formation	Constant	Variable-integrating
Dimension	Variable: from linear two-note to structure developed in space	Small semantic unit
Structuring	Hierarchical in stages (motif-phrase-sentence-period etc.)	Uniting-generalising (interval, metro-rhythm, mode, tonality, timbre, register, dynamics etc.)
Artistic expressiveness	Important quality whose rank ranges from high to low (in general forms of movement)	Inherent quality
Place in the structure of musical content	Intermediate position between sound (tone) and intonation	One of the main elements of structure
Value in a musical composition	High in classical music, but varies in other epoch and style conditions	High in classical music, but varies in other epoch and style conditions
Designation of the genre	“Melody” is a genre of vocal and instrumental pieces	“Intonation” is a genre of prelude to Gregorian chant

Chart 2

<sup>4</sup> For more details about the structure of musical content see: Казанцева 2009: 18–25.

It is clear that melody and intonation differ from one another by many parameters. They are similar in only two cases. In the first place, they are similar when establishing their value in a musical composition. Nevertheless, their existence in different contexts needs to be taken into account: melody exists in the system of means of musical expressiveness, while intonation in the system of elements of musical content.

Their similarities are more obvious in another aspect: as components of artistic expressiveness. Yet, here, too, we cannot do without some nuances of difference: melody unfolds in the energy of movement, temporary deployment, modal changes, metro-rhythmic and potentially harmonic functions, while intonation is powerful in its semantic “infinity”, leading to typified meanings, it has a tendency to generalise meaning and abstract. In melody, unity is valued, individual and unrepeatable, whereas in intonation its capacity and universality in relation to variable sounds that form it is valued.

### Conclusion

Thereby, it turns out that melody and intonation are not identical, but original, self-contained phenomena, resembling one another as conveyers of the origin of meaning. Intonation “is carried out” with a sound material and the melody is one of the variants of its “materialization”. Only in cases of brief expressive monophonic structure does the melody acquire the function of intonation message and they become almost interchangeable.

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## Melodija ir intonacija

### Santrauka

Muzikologinėje vartosenoje melodijos sąvoka, nepaisant savo aprėpties ir tam tikro autonomiškumo, glaudžiai susijusi su kita pamatine sąvoka – intonacija. Glaudų sąryšį tarp šių sąvokų patvirtina jau vien tai, kad kalbant apie muziką jos itin lengvai kaitaliojamos. Analizuodami intonaciją, dažnai turime omenyje būtent melodiją. Tuo tarpu įprotis redukuoti intonaciją iki melodijos ypač būdingas atlikėjams, kurie įpratę muziką suvokti lineariškai, – dainininkams, stygininkams ir pūtikams. Kai kurie tyrinėtojai taip pat linksta prie šių sąvokų suartėjimo ar net sinonimiško vartojimo. Dėl šios priežasties vertėtų pamąstyti apie melodijos ir intonacijos sąvokų atskyrimą, kiekvienos iš jų ypatybių išskyrimą ir panašumo bei vienos pakeičiamumo kita legitimumą.

Minėtų sąvokų vartosenos analizė atskleidžia, kad dauguma tyrinėtojų melodiją apibrėžia pagal tokius esminius požymius kaip horizontali linijinė garsų seka, pasižyminti tam tikru išbaigtumu ir vientisumu, kaip pagrindinis balsas daugiabalsėje homofoninėje faktūroje, kaip figūratyvinio ir semantinio lygmenų vienovė. Intonacijos sąvoka interpretuojama kur kas įvairiau. Šiame straipsnyje ji traktuojama kaip mažiausias semantinis muzikos elementas, kurio svarbiausias vaidmuo yra priklausyti didesnei muzikos sferai ir turėti tam tikrą semantinę apimtį (smulkus vienetą).

Abi sąvokas palyginus skirtingais parametrais, paaiškėjo keli dalykai. Faktūroje melodija visada vienbalsė, o intonacija homofoninio ir harmoninio daugiabalsiškumo atvejais apima visus faktūros sluoksnius. Daugiabalsiame audinyje vienu metu gali skambėti dvi ar daugiau vienbalsių intonacijų. Kalbant apie apimtį, intonacija yra lakoniška, o melodija yra labiau išplėtotą linijinę minties išraišką. Struktūros požiūriu melodiją sudaro atskiri motyvai, frazės, sakiniai ir pan., o intonacija yra visiškai monolitiška. Tiek melodija, tiek intonacija pasižymi išraiškingumu, nors semantikos svarba jose skiriasi. Iš melodijos ir intonacijos išaugo skirtingi žanrai: iš melodijos – vokalinės ar instrumentinės pjesės, kuriose ryški totalaus melodinio Prado dominanti; intonacija tapo grigališkojo choralo užuomazga.

Apibendrinant galima teigti, kad minėtos sąvokos artimos tuo, jog abi perteikia reikšmes, o kitais bruožais yra gan skirtingos. Dėl šios aplinkybės jos laikytinos muzikos turinio struktūros dalimi. Hierarchiškai organizuotoje struktūroje intonacija užima teisėtą ir svarbią vietą, o jos semantinė savastis priklauso nuo garso išraiškos galimybių, kurių pagrindu vėliau formuojasi tokie dideli semantiniai dariniai kaip muzikiniai vaizdiniai. Melodija, kaip ir kiti muzikos kalbos elementai (harmonija, ritmas ir t. t.), užima tarpinę padėtį tarp garso, kaip akustiškai išraiškingo muzikos turinio komponento, ir intonacijos, kaip mažiausio semantinio darinio. Turint omenyje tai, kad melodijos ir intonacijos sąvokų apibrėžtys nesutampa net reikšmės sudarymo plotmėje, sąvokų sinonimiškumas tampa neįmanomas. Jos beveik sutampa tik tais atvejais, kai kalbama apie išraiškingą vienbalsį motyvą ar frazę (pavyzdžiui, kai kuriose retorinėse figūrose).

**Reikšminiai žodžiai:** melodija, intonacija, muzikos turinys, Borisas Asafjevas.

## Reflecting on the Generation of Zero, Lombardus Anonymous and Guido

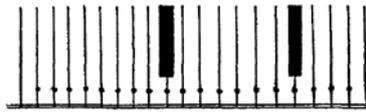
### Annotation

The didactic theory of late Renaissance, confident within its own aura of catechism, shaped its perception of medieval musical thought to its own prescription, forging music theory anew to its own conceptual accord with the unintentional patronage of Boethius, leading through the Age of the so-called Reason directly into the Age of the so-called Enlightenment. In this manner, it also paved the way for the future attestation that was to be found in the so-called tonal theory whose features also helped carving, in its own reflection image. In this respect the shape of harmony and voice leading has been driven by normative adjustment and regulatory dicta in place of the existent tonal and intervallic characteristics, already inherent in both the tonic and the tonal system whose birth and laws is in the deep past, irrespective of whether they had been detected or not.

**Keywords:** generation of zero, Lombardus Anonymous, Guido, musical systems, musical scales, medieval musical scales, musical scales of Renaissance, musical scales of antiquity, ancient musical scales, keyboard, tuning systems, tonal systems.

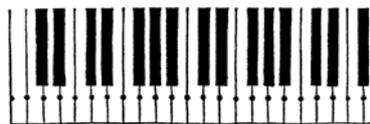
### Looking at its own reflection

In 1511, in the middle of the Renaissance, a book by Sebastian Virdung (*Musica getutscht*) was published. It was the earliest treatise on instruments, including the supporting theory behind them. In the book a drawing of the medieval keyboard, used to explain the status and the evolution of the musical system is presented, stating: “When Guido wrote about the monochord, he considered only the diatonic genus and for a long time the clavichord, in accordance with this (genus) had no more than twenty one keys, like this.”<sup>1</sup>



Example 1a. Medieval keyboard (*Musica getutscht*, 1511)

On this keyboard, there is only one black key (B♭) and seven white ones (C D E F G A B) marking thus the first distinction of the functional role of the tones in relation to one another, carving a primitive type of tonal relations in which B♭ is considered to have a different function than B, expressing thus two categories of tones, one with seven and another with one (B♭).<sup>2</sup> A few pages later a drawing of the Renaissance keyboard appears having five black keys, being the natural evolution of the previous, adding ‘the chromatic genus’ of the ancients to the ‘diatonic genus’ of the Middle Ages.



Example 1b. Renaissance keyboard (*Musica getutscht*, 1511)

Virdung had obviously never seen a medieval keyboard but he had seen a Renaissance one, hence his argument is based on a subtractive procedure, starting from the keyboard he has seen, subtracting black keys until he reaches the hypothetical medieval, inadvertently exhibiting the perceptual perspective of his period.

His claim lies on the principle that there are seven phthongs of the same stature (white keys) and one of a different (black), which in his mind constitutes the medieval structural matrix of Guido, who is known to the Renaissance as the one who introduced the seven letters for the tones and also invented the syllables *ut re mi fa sol la*, although the letter names were 150 years older. Nevertheless, that it was impossible to detect it due to the intentionally imposed speculative darkness permeating the Middle Ages, throughout the Renaissance.

<sup>1</sup> Virdung (1511) 1993: 124.

<sup>2</sup> The inclusion of B♭ constitutes the use of artificial (i.e. non-natural) division of the tone, proving thus that all tones were divisible and all ‘artificial’ semitones possible. The exclusive reference to B♭ belongs to the practice of theory as the medieval composers were using F♯ quite normally, adding eventually E♭, C♯ etc.

In many respects, this is not Virdung himself arguing: he simply states the Renaissance theory being only the messenger, expressing the way his time understands theory. His confidence is drawn directly from the study of the most important text of the Renaissance, *De institutione Musica* written 1000 years earlier by Boethius,<sup>3</sup> to whom he resorts every time there is a dispute, as does almost every other scholar of the Renaissance. In reality, he does not resort to Boethius but to what Boethius represents, i.e. the ancient scriptures. In that respect, Guido is only a provincial inventor of names useful to singers to find their notes, who does not in any way belong to the notion of Boethius, and who carried into the Renaissance the neo-Platonic view that music relates first to the elements of the universe (*musica mundana*), then to the human existence (*musica humana*) and finally to the practicality of its making (*musica instrumentalis*), resulting in what he characteristically states: “The one who has mastered *Musica Speculativa* and only he, can truly judge the work of a composer or a performer both of whom are concerned only with music, while the philosopher understands the whole of music.”<sup>4</sup>

**Reflections from the dark**

Back in the medieval time, c. 1000, two different men lived in the area of Lombardia. The one born c. 995 was Guido, who was later to remain in historiography as a kind of popular scholarly hero for his invention of the syllables for the tones. The other, born about 30 years earlier, remained in obscurity and became a member of posterity in a rather idiomatic way, being mixed-up with another theorist, Odo de Cluny because he was made to use the name Pseudo-Odo instead of his proper name Lombardus Anonymous. Nevertheless, at about the year 1000, in the area of Milan a treatise called *Dialogus de Musica* by Lombardus Anonymous was published.<sup>5</sup>

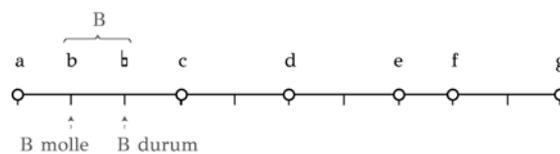
Contrary to Renaissance belief, which accredits Guido for it, Lombardus Anonymous used the letter names for the tones approximately thirty years earlier, having taken them from yet an earlier writer, Hucbald who invented them c. 880, numbering also the modes from 1 to 8, replacing the ancient tribal names used by Boethius and other writers, which were irrelevant in terms of meaning and are nevertheless still in use today.<sup>6</sup>

In his formation of the horizontal succession Lombardus Anonymous uses eight different tones marked with letters (C D E F G A b) the last two being derived from the letter B, one round and one square.<sup>7</sup>

Forma toni l.	C. to.	D. to.	E. Sem.	F. to.	G. to.	a. Sem.	b. 2 Sem.	C. to	d
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Example 2a. The series (Lombardus Anonymous)

Thus, there are eight tones in total, using respectively eight names, which however derive from only seven letters, from which *Musica Speculativa* counting the signifier instead of the signified theorized eventually the existence of seven tones in a mode.<sup>8</sup>



Example 2b. The origins of the series

<sup>3</sup> The complete works of Boethius were published in 1492.

<sup>4</sup> Boethius, 1.34.223. This notion is repeated almost identically by the renaissance scholars, a thousand years later (Gaffurio, 1967: 41).

<sup>5</sup> Initially it was thought that the treatise belonged to Odo de Cluny (878–942) but when it was realized that this hypothesis was wrong, in order to facilitate the scholars themselves (when making reference to the treatise to each other) instead of giving him his rightful name, labeled him Pseudo-Odo, regardless of the fact that the *pseudo* prefix did not relate to his scholarship but to theirs.

<sup>6</sup> Consequently, the zealous didacticism of the theory used both the numbers and the tribal names following the paradigm of Boethius, as the numbers alone were apparently too simple for scholarly oratory.

<sup>7</sup> Called respectively *molle* and *durum*, according to their function, meaning soft and sharp.

<sup>8</sup> Looking at the example there seems to be a scale encompassing the diapason (C to C) with an additional D at the top. This D, however, is not separated as being outside, but emphasized as constituting the final.

This series, although it is only a sequence of distances abiding by the laws of the tetrachord, was presented by the Renaissance writers as being fixed in terms of pitch, commencing on the tone C, as is today, described in this sense initially by the Renaissance and consequently the classical theorists. Bartolomeo Ramos in 1482 explains that

We therefore have decided to begin the melody on C in this our new form of a very beautiful, wonderfully pleasing art, both because that pitch is a better known sound, as will be shown later, and also because, as Guido himself says, we find it first in the nature of the numbers ... In fact it has been found that through instruments that ancient monochords began on the same low C. For this reason we decided to begin on the same letter in singing, although in the monochord according to the Greeks Boethius has been followed on A.<sup>9</sup>

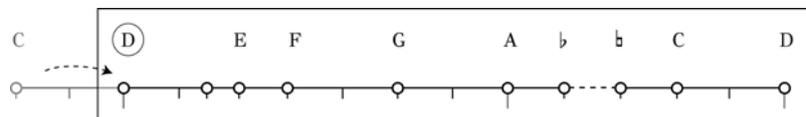
D for Lombardus Anonymus is not a pitch but a point at the end of a distance, being either a tone or a semitone apart from the next letter, as it had been earlier for Hucbald. Thus, his apparatus is no more than a ruler of distances, commencing on D, bearing no relevance to the actual sound being produced. Thus, his ruler is purely schematic representing distance, starting on any pitch, without relating to any specific frequency.

The other important aspect of this apparatus is that it starts on C and ends on D, seemingly not being guided by the span of the diapason.<sup>10</sup> Lombardus Anonymus considers thus that the horizontal succession covers the distance from D to D and descends one sound below, to C.



Example 3. The series as a ruler (Lombardus Anonymus series)

In this respect, the succession meant begins on D and it is in minor mode, contrary to the didactic theory preaching about the naturalness of C as the first note of the system, which was supposedly both scientifically and historically major, carried through to the 20th century by the classical theorists. Thus, the first tone of the series being C has been given for centuries an importance it does not really possess as being the beginning of the so-called natural scale.<sup>11</sup> In the treatise of Lombardus Anonymus, however, C has a different role, being the subtonus, the phthong below the final.



Example 4. The use of subtonus (Lombardus Anonymus)

The lower C is not then part of a scale but part of an apparatus and its role as explained in the treatise, is to approximate the final D.<sup>12</sup>

An example from the music testifying the actuality of its usage in this manner is found in the monophonic psalm *Dixit Dominus* of about 800.



Example 5. C approaching the final as part of the clausula (Anonymous, *Dixit Dominus*, c. 800)

<sup>9</sup> Ramos, 1993: 95–96.

<sup>10</sup> In the earlier treatise of Hucbald it was precisely the case using the letters from A to P to name all the tones bypassing the octave division.

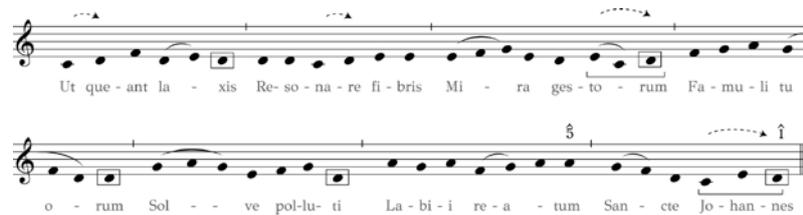
<sup>11</sup> One spanning from C to C, including the naturalization of b in the same manner presented by Viridung among others.

<sup>12</sup> Tonic theory stopped using the term subtonus, which was substituted by the term leading note (note sensible) eliminating B $\flat$  from the 'natural' scale, forcing thus the interval of a tone below the tonic to become semitone by decree.

As it can be seen in the actual music, C is neither first nor it has the functionality of final. Its importance therefore lies exclusively on the theoretical impression of being significant for the mere reason that it has been first in the taxonomic order, carried from treatise to treatise, and reinstated in the make-believe style of the so-called enlightenment era, as a fundamental rule.<sup>13</sup>

The same type of horizontal handling is also evident in the composition of the other major thinker of the period, Guido, presented in order to demonstrate the syllables marking the distances between the phthongs (ut re mi fa sol la), which has also been misinterpreted as 'starting on C', due to the fact that the first phthong of the hymn is C.

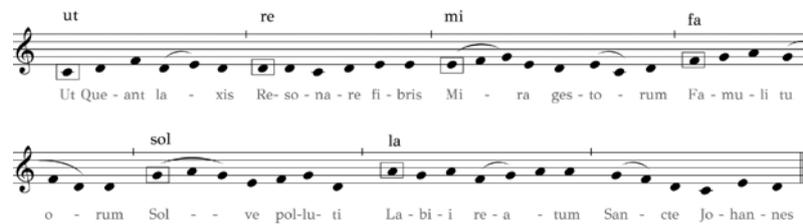
Guido has thus been ascribed as being the instigator of the scale commencing on C as it was passed by the Renaissance scholars such as Gaffurio, Ramos and others, while in fact the hymn is also in minor mode, and it does not have C as its final but D. In this sense, C appears in the role of subtonus according to the principle of Lombardus Anonymus, marking the end of sentences, and at the beginning of phrases 1 and 2 on the arsis, leading to D, following the syntactical flow of the text, as it ought to.



Example 6a. C as subtonic approximation to D (Guido, *Ut queant laxis*, c. 1027)

In this manner C, acting as the subtonus below D, having no functional role other than approximating the final, is being used solely as a cadential element.

The reason C has been understood as commencing the series, is mainly a result of the didactic theory preoccupied exclusively with the task of simply marking the syllables of the six guidonian tones at the beginning of each phrase.



Example 6b. The use of the hymn by theory as a vehicle to show the syllables (Guido, *Ut queant laxis*, c. 1027)

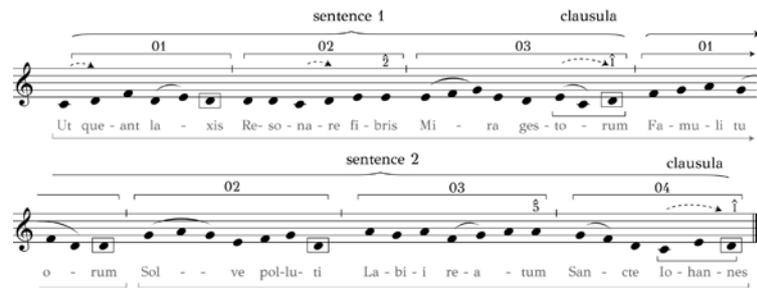
Thus, the relation of the syllables to the ascending series has been given the ultimate attention using the hymn as an exclusive proof of it, manifested as being of outstanding significance, although it bears no relation to the functionality of the system, adding only an encyclopedic aura of knowledge, characteristic to *Musica Speculativa*.<sup>14</sup>

The formal structure of the piece is comprised of one period of two sentences, the first of which contains three phrases and the second four, corresponding to the seven lines of the first stanza of the hymn. Each sentence is marked with a clausula, leading stepwise to the final from both directions.<sup>15</sup>

<sup>13</sup> To this, the fact that not all treatises known today were known to the renaissance theorists was contributed, which could either be coincidental or the direct result of their discriminative stance towards the medieval culture, resorting back to Boethius each time a dilemma would arise.

<sup>14</sup> Whether such a piece (as *Ut queant laxis*) does exist or not, bears no significance as to the validity of the system of Guido. That which matters instead is its bare functionality, the piece itself could only serve as a reference tool to singers, which is what probably did, although a table could be just as good. Its use as a snapshot of the syllables by a later theory, without any further examination of its characteristics, points more to the tendency of the theory to state the obvious and its dedication in carrying the torch of knowledge to the centuries, satisfying thus its inner need to be utterly didactic and magnanimously enlightening.

<sup>15</sup> There is a discrepancy between the phrases of the music (3+4) shown by the clausulas and that of the text (4+3) as suggested by its meaning. The comparative study by Harbinson, 1971, indicates that the phthongs at the end of the first sentence on the word *gestorum* are potentially different from the ones accepted as being original (F C D instead of E C D).



Example 6c. Music and text (Guido, *Ut queant laxis*, c. 1027)

The final phrases of both sentences end on the final D, being approached by the two phthongs of the clausula (E and C), a cadential characteristic occurring only in these two places. The two penultimate phrases end respectively in E (2̂) and A (5̂) preparing the clausulas. Thus the three phrases of the first sentence end in 1̂ 2̂ 1̂ and the four of the second in 1̂ 1̂ 5̂ 1̂. The text, however, follows the syntactical form of 4+3 lines.<sup>16</sup>

The first note of the piece as well as of each phrase is in every respect irrelevant, since that which defines a phthong is not its taxonomic position within the series but the way it relates to the rest of the phthongs within the mode, rendering more important the final rather than the initial phthong. The reason for the tendency to focus on the starting tone lies more in the fact that there is no functional distinction between the point of the tonic system (tone) and one of the mode (phthong) for the Renaissance writers, although they know and use the ancient names such as Mese, Hypate, Nete etc., however, not in their functional sense but as historical descriptive alternatives to the letters.

Tone is a mere pitch within the tonic system with no other properties except its position and physical distance, while a phthong relates syntactically to other phthongs within tonality. In this respect, there are no tones inside a composition nor there are phthongs in the tonic system. An analogy could be made to money in a pocket, having only a metrical distance from each other, without relating to anything and money in the market, having buying value, involved as a result in a multiplicity of relations.

Their difference in terms of use lies in the fact that the second (phthong) has a 'social' role hence its functionality is based on value whereas the first (tone) has not, hence its basic functional property is being governed solely by rate. In this respect, Mese is not the property of the tonic system but of early tonality, lying right in the middle (being the tonic center) rather than at the end (and the fact that a phrase ends on it does not justify the use of the term final), in the same sense that the main train station is also central and not final.

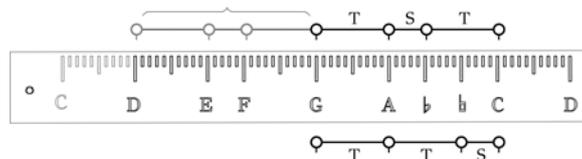
### Reflecting on the intervals

In the treatise of Lombardus Anonymous in order for the distance to be demonstrated from one tone to the next, the intervallic syllables to(nus) and sem(itonus) have been used between the points represented by letters, as seen in the next example.

Forma toni l.	C. to.	D. to.	E. Sem.	F. to.	G. to.	a. Sem.	b. 2 Sem.	C. to	d
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Example 7. Formation of the series (Lombardus Anonymous)

His ruler, although seemingly simple, is not just a mere measuring tool but primarily a tool for calculating the intervals governing the relations of the phthongs to one another, lingering more towards (the phthongs of) tonality than towards (the tones of) the tonic system.

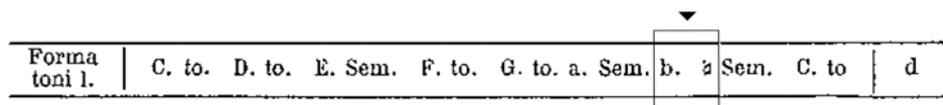


Example 8. The double function of the ruler

<sup>16</sup> For the syntactical layout of the text, see Appendix.

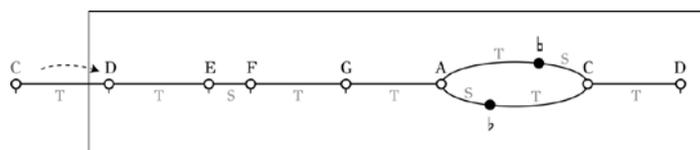
Thus, the succession coming upward from G would either be a repetition of the first minor tetrachord from D (T S T) using the soft B (G A  $\flat$  C) or use the sharp B following the other minor tetrachord T T S (G A  $\flat$  C), while one starting on F would have to follow the soft ( $\flat$ ) by default in order to have the correct intervals, according to the tetrachordal succession, resulting in F G A  $\flat$ .<sup>17</sup>

However the most interesting aspect of this formation is the fact that there is no intervallic syllable between the two Bs ( $\flat$   $\flat$ ), which is perhaps the most significant observation for the functionality of the system, surpassing any other and being far more important than the way the diapason keeps being repeatedly divided in treatises to smaller intervals, from the Renaissance onwards, in an almost fatalistic quest since as long as two semitonal divisions within the tone exist, any additional arithmetic action of division, rendering decimal points, is destined to be functionally superfluous.<sup>18</sup>



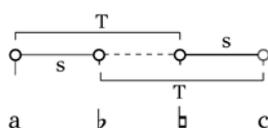
Example 9a. The missing interval (Lombardus Anonymous)

As explained in the treatise, the distance from A to  $\flat$  is a semitone, so is the distance from  $\flat$  to C. Also the distance from  $\flat$  to C and A to  $\flat$  is a tone. Thus, in order for the distance from A to C to be crossed, a calculative jump is being required, whether moving up or down.



Example 9b. Syntactical crossing of the gap

This observation determines the manner of the horizontal movement, both upwards and downwards (showing possibly the earliest signs of mirroring design) in terms of functionality, marking at the same time two different categories of tones, C D E F G A on the one hand and  $\flat$   $\flat$  on the other, dividing the tones into two functional categories, one containing six and another containing the remaining two phthongs. The most important statement of the treatise however is that the distance between B molle and durum is neither a tone nor a semitone.<sup>19</sup>



Example 10a. The obscure distance (Lombardus Anonymous)

The distance (from  $\flat$  to  $\flat$ ) is of course a semitone and Lombardus Anonymous is well aware of it, since in the first part of the treatise has already presented the division of the monochord, arriving at both points with both brevity and precision. It is not then a matter of tones and distances but one of functionality, the distance is there, facing the theory, however there is no functional connectivity to either of these two points. This is perhaps one of the most interesting statements of early medieval theory, setting the primal foundations of

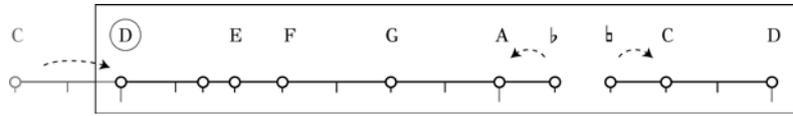
<sup>17</sup> On the fact that the second tetrachord is identical to the first (from D) is based on the notion that G, having the same intervallic characteristics as the first, is considered functionally also the final, giving thus importance to the phthong of the lower dominant, which constitutes the beginning of the plagal mode (G A B  $\flat$  C D E F), in which the so-called final lies (both visually and functionally) in the middle instead of at the beginning, resembling thus the Mese, which is understood functionally as the center (and not the end) of ancient tonality.

<sup>18</sup> In the first part of the treatise a meaningful functionally division is provided by Lombardus Anonymous, sparing intricate calculations pertaining to the exhibition of the art of division.

<sup>19</sup> *Prima vero nona  $\flat$  et secunda nona  $\flat$  ad se invicem neque tonum neque semitonum. Nulla autem mensura vel numero semitonii spatium ad tonum.*

tonality, as it does not refer to the actual distance, which is in every respect obvious, but to the tonal attitude of the phthongs, in relation to one another.

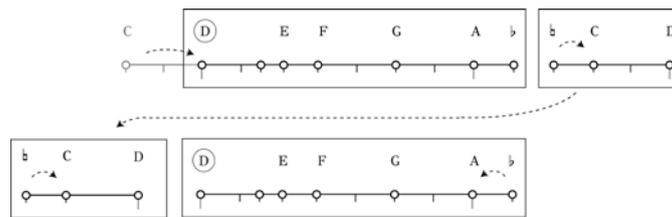
In the way it has been expressed, the non-distance between the two Bs contains an implication that there is a gap right in the middle of the series, which requires a functional jump to the next section, in either direction.<sup>20</sup>



Example 10b. The functional break in the middle

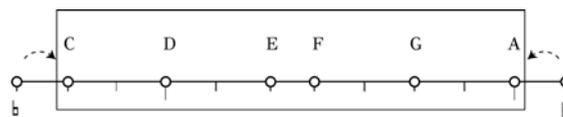
In this manner for it to continue, a leap is necessary from A either to b or from b to C, in order to reach the final D. Thus, in the lower section the approximation of the D through the subtonus is explained, while in the upper the continuation from A through the break all the way to D, which functionally represents the final. The use therefore of two Ds, while just one would have been sufficient, is needed in order to show the two different aspects idiomatic to the horizontal movement.<sup>21</sup> In this respect, this does not constitute a (tonic) scale but a (tonal) apparatus.

The gap appears to be in the middle of the series but as it is natural, there is no such thing as ‘middle of the series’ since there are two different components comprising it, the second of which could equally serve its purpose placed at the beginning.



Example 10c. The two components of the series

In this respect, the seemingly second part of the series (being essentially formed on the same tones of the beginning) could be placed on the other side, eliminating thus the doubling of tones. A rearrangement therefore towards a functional representation of the series could be drawn as follows.

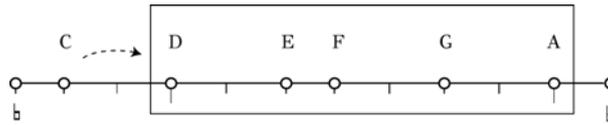


Example 11a. The rearrangement of the series

In this arrangement as it becomes obvious the series having dropped the unnecessary repetitions of tones, becomes an apparatus of phthongs that also explains the use of the two forms of B (b b) leading to their respective phthongs, C and A, in which case the early modal depiction, points at something quite more interesting in terms of how the tones relate to one another, constituting one of the earliest manifestations of tonality, provided that not only the distances following the tetrachordal order (S T T S T T S) but also the role of the phthongs is taken into account, in which case (as C is the subtonus of D) the outer ends are not C and A, but D and A.

<sup>20</sup> Shown also in Example 9b.

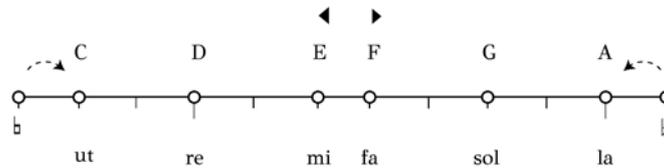
<sup>21</sup> The higher denoting the upward movement from A to D and the lower the downward movement from the final to the subtonus, in the cadential implication of which D is perceived as central instead of final.



Example 11b. The outer ends, D and A

In this manner, the so-called final is no longer at the end of the series but in the middle, functionally identical to the ancient Mese, pointing at a different interpretation of the system, one that includes tonality.

This also points to the *Deductio* of Guido, the only difference being the addition of the syllables (ut re mi fa sol la) indicating exclusively the distance between the tones, running in both directions having in the middle the semitone mi-fa, arriving at the mirroring intervallic form T T S T T with the two additional semitones at both ends (S T T S T T S).<sup>22</sup>



Example 12. The *Deductio* of Guido

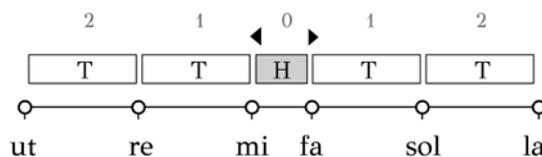
In reality, both thinkers of the medieval practice, who constitute perhaps one of the most important generations for the advance of musical understanding, which as a result of the darkness imposed by historiography on them, have not been studied for their intricate observations but instead in a superficial generic manner pertaining to the western notion of ‘achievement’, being mentioned in relation to the so-called main points of their work, according to the Renaissance and classical didactic mould initially, and the 20th century one equally generic, afterwards.<sup>23</sup>

Thus, they have both been considered mere contributors, in accordance to the linear view of history, by the guild of Musica Speculativa, where the evolution of theory is directly tied to time, advancing as time does.

### Reflecting the distance

Guido presents two different kinds of elements, claves, i.e. points on the tonal spectrum at a certain distance from each other, according to the tetrachordal arrangement, having the letter names from A to G and intervallic syllables (ut re mi fa sol la) showing the distance of the movement within a certain horizontal succession, not related in any way to a specific pitch.

In terms of distance, his series of intervallic syllables begins on ut, which is not C, as each one belongs to a different measuring system representing different units, and ends on A, leaving out both Bs, neither of which has been given a syllable. The selected tones have been put in order forming a mirroring apparatus with the semitone (mi-fa) lying right in the middle, having ut and la on their respective ends.



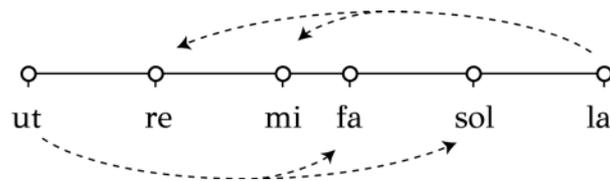
Example 13. *Deductio* and its mirror properties of intervals

<sup>22</sup> The *Deductio*, constituting the basic grundgestalt formation after all repetitions have been removed, having been misunderstood is renamed to ‘hexachord’ by the renaissance theorists (in the manner of tetrachord, pentachord etc.) in order to comply with the ancient terminology brought to them by Boethius.

<sup>23</sup> This is supported by the fact that the first translations from the Latin took place in the 20th century, one of the two being out of print just after its first publication in 1978.

One of the most important aspects is that Guido's apparatus renders a mirroring image not of tones but of intervals and obviously includes the notion of zero, contrary to the following generations, which did not seem to be aware of its necessity for the formation of neither the tonic nor the tonal systems, capitalizing exclusively on the 'starting point' of an exclusively ascending series, as though music could be thought as movement based on a starting point, without consideration of the actual travelling, which cannot exist unless there is a destination towards which the intervals advance.<sup>24</sup>

Guido's measuring apparatus does not start anywhere in particular, it only measures the distance between the tones in order to render the right intervallic relations, turning thus the tones of the tonic system into phthongs, the relation of which constitutes the principle of tonality.



Example 14. *Deductio* and its tonal reflection

In this respect the relation from ut to fa and sol is functionally inversely analogous to the relation from la to mi and re (both of them known to ancient Greeks representing the distance from the Mese to Hypate and Nete)<sup>25</sup> with respective symmetric analogies from both ends (ut and la) pointing directly to the undetected properties of bimodal tonality (one with two tonic centers).

### The missing zero

Both the generation of zero as well as the entire Renaissance all the way to Jean-Philippe Rameau, use the Roman numerical system in their writing, which has a very idiomatic element built in its structure. It lacks not just the number itself, but the entire notion of zero, being unable to perform calculations involving mirroring, hence they resort to a starting point from which afterwards move up, such as the series of numbers starting on 1 or the series of notes starting on C. The only difference between the two is that the generation of zero had no notion of it as it was brought to Europe by Leonardo Pisano two hundred years later in 1202, while the Renaissance scholars, already having access to the Hindu-Arabic system,<sup>26</sup> perhaps did not possess the necessary stamina or perhaps the necessary curiosity for it, in order to incorporate it in their scholarship in a system such as the tonal, which is inherently enantiomorphic. Thus, in their calculation, using the truncated Roman system to mark the places of the tones, measuring tones instead of intervals upwards from C, since according to the comforting to the Christian church, Aristotelian notion supported by the pre Hindu-Arabic numbers, nothing existed below 1, hence nothing existed below C.

In this manner, they arrived at a system, which contained two defects: one the lack of mirroring design and the other similarly problematic: it calculated its function in reference to points, not distance, counting therefore not the intervals but the tones, which are mere points, calling them notes.

Thus before 1500, Renaissance theory, after having turned B durum into a degree, calling it eventually B natural, including it in the same functional order as the other six tones, it was destined to arrive at a philosophical medieval keyboard, forging two categories of functional tones, one containing seven tones and the other one.

In this manner, after the canonization of B durum into 'B natural' they kept repeating a series of seven tones, the heptachord, instead of a series of intervals, with the ultimate result the inclusion of the tritone inside the series, inventing subsequently rules to avoid it, as if it were an inherent idiom of the system and not their own invention.<sup>27</sup>

<sup>24</sup> It would be similar to determining the movement of a train by registering only the station of departure, within which it would be implied that since the first phthong of Mozart's Symphony No. 40 in G minor, is E flat that a theory for the relations of the mode could be built on it, as a result.

<sup>25</sup> Middle, with the equivalent of upper and lower dominants.

<sup>26</sup> The Hindu-Arabic system was first brought to Europe by Gerbert d'Aurillac (later Pope Sylvester II) before 1000, without the zero.

<sup>27</sup> Natural are considered the intervals within the tetrachord, the ones i.e. which do not form a tritone. The naturalization therefore of b which does, is expressly artificial, gestating the necessity for additional rules for its evasion.

### The reflection from the medieval keyboard

It has been obvious that both phthongs stemming out of the letter B ( $\flat$   $\flat$ ) have identical properties, they function therefore in the same manner.<sup>28</sup> This presents a conflict of functionality between the two views, as the description coming out of the hypothetical medieval keyboard, invented by the Renaissance scholars, identifies the two forms as having a different function each, one being similar to the other six tones ( $\flat$ ) and the other different ( $\flat$ ), while the medieval writers convey a different meaning considering both ( $\flat$  and  $\flat$ ) functionally identical.

Thus the medieval keyboard does not relate to the one of the Renaissance, which is based functionally on one black key ( $\flat$ ) as it has not one but two black keys on both molle and durum, one relating to A and the other to C, both being phthongs of approximation. This, by default increases (in relation to the Renaissance view) by one the black keys to two, reducing also by default the white keys to six.



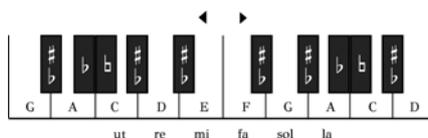
Example 15a. The medieval keyboard

In this respect the functionality of durum is to approximate C from below while the functionality of molle is to approximate A from above, rendering justice to Lombardus Anonymous who in the year 1000 detected that the distance between them is neither a tone nor a semitone.



Example 15b. Keyboard C to A and phthongs of approximation

One then could follow the example of Viridung, starting from the medieval keyboard onwards adding black keys, arriving perhaps at a sensible keyboard, which might not exactly look like the one made on the directive of the imperative theory, but perhaps one that matches the way music functions, since the possibility to play music is rather greater than play the reflections of theory on it.



Example 15c. The syntactical layout of the keyboard

In this sense, the keyboard following the tetrachordal sequence of intervals, contains twelve different tones, eight of which constitute the basic phthongs in its expression of mode (instead of seven) containing three functionally reciprocal semitones (E-F,  $\flat$ -C, A- $\flat$ ) all of them necessary for the syntactical horizontal movement, where both  $\flat$  and  $\flat$  are phthongs of approximation, without the forced intrusion of the tritone, which is the direct artifact of the arbitrary naturalization of  $\flat$ , brought forth out of the ardent desire to theorize.

### The other side of reflection

Thus both thinkers of the year 1000, the medieval generation of zero, arrived at the same system of relations between the phthongs, being perhaps too early, perhaps in a too hostile scholarly and social territory, to distinguish a tone from a phthong, and the tonic system from tonality. Not having the terms available did not hinder them, however, from expressing an infallible notion of tonality, where phthongs relate to each other in a meaningful way towards structural narrative, having known that natural tones are not any. The only things that exist are natural intervals, following the tetrachordal principle of the ancients, who as their myths prescribed,

<sup>28</sup> See examples 9b, 11b.

when humans appropriate the divine laws or exhibit insolence, are haunted by the Erinyes with (more) reflections of the theory, in which the road to redemption passes through constant rectification of rules.

At the same time, both writers proved that opening the way could never be enough, as long as on the path of time *Musica Speculativa* keeps staring, with its studied innocence – also in accordance with the ancient myth – at its own profound reflection.

### Appendix

The text of the hymn, exhibiting the 4 plus 3 line syntax, conflicting with the musical phrases, which follow the 3 plus 4 order (Ex. 6c).

Latin	Line-by-line	Meaning
<i>Ut queant laxis Resonare fibris Mira gestorum Famuli tuorum</i>	So that with relaxed may resound voices your miraculous deeds your servants	So that your servants may resound your miraculous deeds with relaxed voices
<i>Solve pollute Labii reatum Sancte Iohannes</i>	free from the burden their (our) stained lips Sancte Iohannes	free their (our) stained lips from the burden Sancte Iohannes

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## Mąstant apie nulinę kartą, Lombardijos anonimą ir Gvidą

### Santrauka

Dogmatiškos katekizmo dvasios persmelktoje didaktinėje vėlyvojo Renesanso teorijoje randame pagal naujųjų laikų receptūrą pakoreguotą viduramžių muzikinio mąstymo supratimą ir iš naujo perrašytą muzikos teoriją pagal to meto įsivaizdavimą ir iš Boetijaus rankų (jam nežinant) perimtą antikos palikimą. Tokiu būdu Renesanso teoretikai peršoko iš vadinamojo Proto amžiaus tiesiai į vadinamąjį Apšvietos amžių. Jie taip pat paruošė dirvą tam, kas vėliau išgalėjo kaip vadinamoji tonalios muzikos teorija, iš kurios broožų ėmė klostytis jos pačios atspindys.

Šiuo požiūriu harmonijos ir balsavados broožus labiau lėmė prisitaikymas prie normų ir reguliavimo principai, o ne tonacinėje ir tonalioje sistemose egzistuojančios tonų bei intervalų ypatybės, susiformavusios gilioje senovėje ir paklūstančios saviems dėsningumams nepriklausomai nuo to, ar jie buvo atrasti ir įvardyti, ar ne.

## Parametrical Judgment of the Cognitive Melodic Realm: A Technological Aspect

### Annotation

The purpose of the present paper is to suggest tools for a closer look at the cognitive quality of musical parameters. “Closer” means that tools are supposed to expand the boundaries of traditional analytical instruments that are based on finding confirmation to creative systems of various musical styles (e.g. classical harmonic style, dodecaphony, etc). Instead of this, suggested analysis relies on the connotational meaning of parametrical expression (like rhythm, tones etc.) in music in question, its cognitive impact on the listener, and in a still broader sense – musical communication. “Closer” also means the possibility to measure and depict unconscious constituent of musical expressing power usually considered as an immeasurable creational mystery. To achieve this a strict procedure of gestural graphics was formed to depict the cognitive quality of particular parametrical expression.

**Keywords:** musical informatics, communicational dimensions of musical structure, musical gestures, communicational analysis model, graphics of gestures and hyper-gestures, validity of composer’s intention realization.

### 1. Theoretical background of parametrical judgment

#### 1.1. Dimensions of musical communication

The attitude to analysis used in the present paper relies on semiotics – for definition of analytical instrument, and on informatics – for defining scales of measuring. Insights of both fields are applied to analyze the cognitive impact of a particular parametrical expression. If the cognitive impact is to be described in semiotic terms (that is, what “impact” notion shows), it is helpful to apply the categories of a communication process – thus it can be traced what is causing cognition, what is the media agent of a cognitive impact, and what exactly this impact is in strict scientific terms. According to Jean-Jacques Nattiez (Nattiez 1990: 3–30), a symbolic process, which causes cognitive communication, has:

1. *Poiesis* is dimension-source of cognitive message. In musical realm, *poiesis* is of different kinds and it depends on musical activity in question. According to Mieczysław Tomaszewski (Tomaszewski 2000), activities (or phases, as he put it) are conception (composing), realization (playing), perception (listening) and reception (critics). For example, for the perception phase *poiesis* can be some listening habits or particular places, likewise for the realization phase it could be, for example, traditions of artistic execution in a particular region. For the sake of narrowness and clarity, in the present analysis only the conceptual phase will be considered – e.g. composing *poiesis*. Thus, every statement in this analysis describes compositional impact on sonority.
2. *Trace* – this dimension means the condition, through which *poiesis* is mediated, reality in which a message lives. A particular musical activity phase relies on particular reality. According to Guerino Mazzola (Mazzola, Park, and Thalmann 2011: 6–10), there are three musical realities:
  - a) *Symbolic* reality trace for meaning of whatever tool used for music conceptualization – like a score, instrument, text or mathematical theory. It is important to stress that what is symbolic is a tool’s action, not the device itself – for example, symbolism of musical instrument is its playability, not its physical sounding construction.
  - b) *Physical* reality is responsible for a symbolic tool’s sounding action – any manifestation, capable of causing musical communication. This could not necessary be communication waves transmitted through the air. For example, a composer is capable of playing music in his head, performing in mind, not in an actual physical moment, but in so-called logical time.
  - c) *Psychological* reality – that is an emotional/artistic side of music.

Different time of musical communication is crucial for analysis of cognitive impact. Again, according to Mazzola (Mazzola, Park, and Thalmann 2011: 236–246), there are **three different communication times**, where sounding (or physical reality trace) occurs:

- 1) Composer plays music (in his mind) in **logical time** – time, where an event can be identified not by occurring in usual timeline, but according to some logical path between events. This logic comes from memories – musical experience and knowledge. By nature, logical time is much slower than real time, allowing a composer theoretically a never-ending proof of the event’s validity, and thus check the quality of the musical ideas.
- 2) Actual air vibrations emitted by musical instruments happen in **real time**. Theoretical analysis is quite limited in this time – a sounding moment is gone at the exact moment when someone tries to think

about it. Therefore, considerably more useful for the scholar's activity is next time, where musicians really have the power to make some conceptual messaging in his music. This creative domain is called time of imagination.

- 3) **Time of imagination.** In this time it is possible to trace musical gestures and hyper-gestures and thus to plan ahead a gestural expression of music, thus its cognitive impact. This trace is central to analytical activity of this paper, so there is a need of a clear definition of the gesture's notion.

In the context of informatics, **gesture** is a result of communication between earlier defined times of physical reality. As for all communications, it has its *poiesis*, trace and (still to be discussed) *aesthesis*. For the gestural *poiesis* stands a current musical situation that is physical time, for example, melody moving diatonically (three further examples are created by the author):



Example 1. Gestural *poiesis* – melody evolving stepwise

A musician can extend this current moment of music by linking pre-existing knowledge in logical time and the future of sounding in imaginal time, that way to predict what music will be when we apply our knowledge. This linking occurs in a gestural trace environment, which is operation to be applied to the current musical situation, for Example 1, it could be a decision to apply a hidden polyphony device (marked PT in Example 2), best known from works of J. S. Bach as a combination of register and intervallic changes:



Example 2. Gestural *trace* – hidden polyphony operation

The described communication source in Example 1 (e.g. *poiesis*) and media (*trace*) in Example 2 cause the actual changing of musical flow, its *aesthesis* – melody interweaving in a way that is more indirect:



Example 3. Gestural *aesthesis* – stepwise melody is changed to more relief motion

That change of musical flow is a predicted gesture – *aesthesis* of communication in imaginative time. As can be seen, knowledge, existing in the past (a hidden polyphony theoretical description), connects the present time (a stepwise melody motion) to realized future – sophisticated melody landscape in time of imagination. That is how the former linking in time through gesture expression occurs, and that is, what exactly will be shown in the analysis of the present paper.

To sum up, for the cognitive impact to occur, we need to trace music communication, and first thing first to identify the communication source – some musical activity, which is happening in particular reality (so far we have discussed two of them) for the musical phase in question. This source impulse is mediated through communication trace realities and of particular interest in this analysis is physical – through application of a different sounding time device physicality can be detached from actual instrumental performance of music and can be used to measure the product of conceptual phase of musical activity (that is, to judge the composer's intentions and realizations).

Physical reality is very much of measuring, which is the main concern of this paper, and this measurement should be applied to the final stage of activity, the result, which can be actively comprehended, and that is **aesthesis of communication's symbolic process**. For the validity of measurement, there should be a clear distribution of musical realities in the communicational dimensions of musical phase, as this implies different referential scales of measuring. Namely, for symbolic reality various scale structures of systemic knowledge

should be used, mainly concerning proper style logic (for example, conforming of piece’s texture to counterpoint rules). For physical reality, various gestural process measuring devices are to be applied (this will be exemplified in the paper). As to the conceptual phase (composition), its *poiesis* lies in psychological reality. This reality cannot be actually measured by scales, but can be projected through a series of psychological devices, namely – motivations, meta-theories, connotation study, and these are in turn *poiesis*, *trace* and *aesthesis* of psychological communication in music. Analysis of such psychological communication contains validation of the composer’s intentions and ideas and subsequently the evaluation of parametrical realization of these ideas is to follow. That is exactly how the two-stage analytical method, proposed in this paper, is described. To exemplify this analytical routine, psychological communication dimensions will be shown for meter parameter (it is almost impossible to show workaround for all parameters responsible for the melodic realm structure due to the limited volume of writing). Speaking not in strict scientific terms, analysis will show why and how a composer can use a particular parametrical expression to communicate his initial creative intention, to convey his imaginative constructs through musical language.

### 1.2. Two-stage analysis model

A two-stage model for parametrical judgment technology is based on communicational dimensions of the conception phase (shown in Figure 1). Most constrains of these communicational dimensions already are or will be analyzed in this paper.

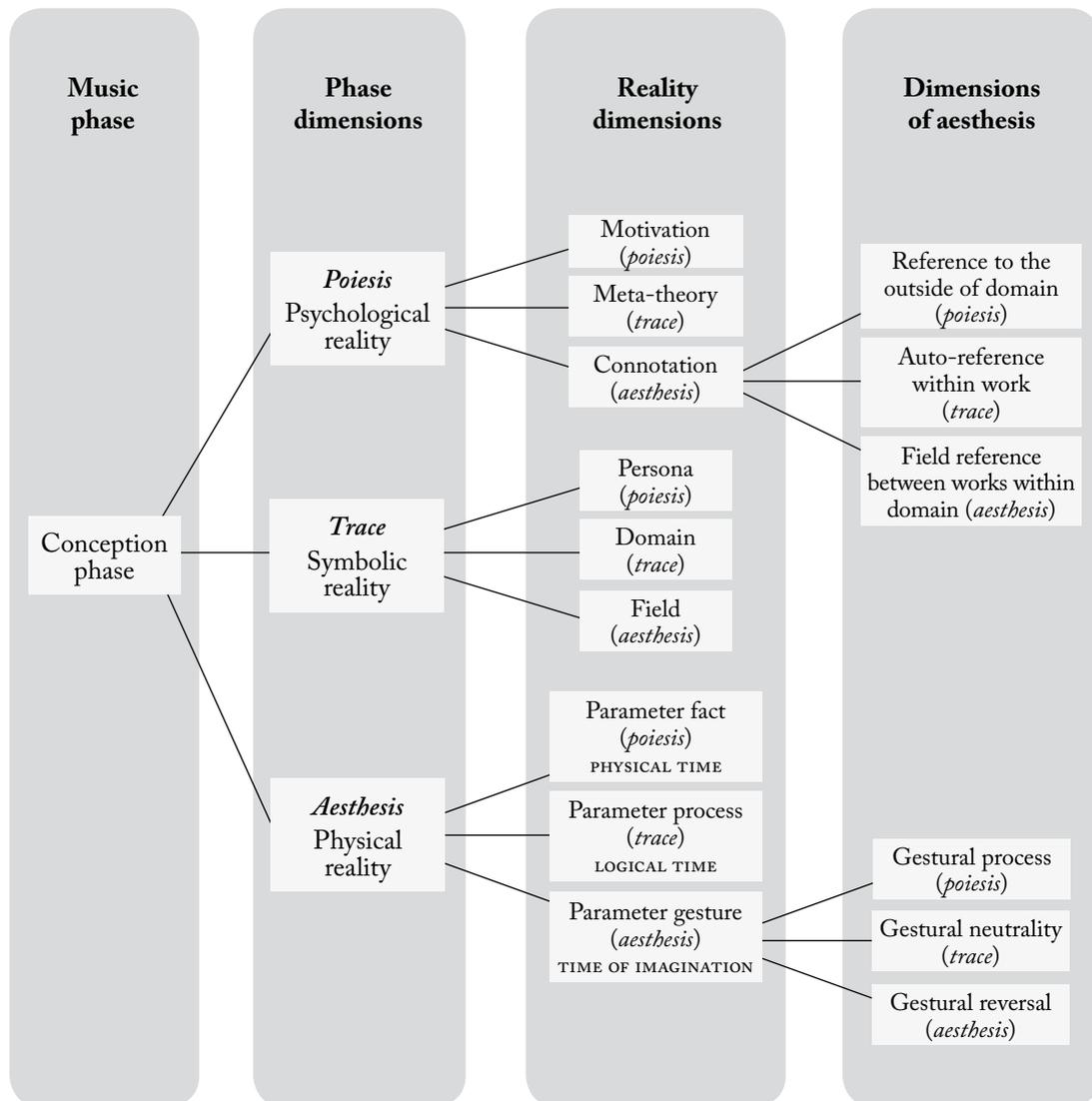


Figure 1. Symbolic dimensions of conception phase (Mickis)

The first stage of analysis comprises detailing of psychological reality that is to examine the structure of the composer’s initial ideas. The following actions should be taken:

- a) look for the motivation of the parameter usage as poiesis of implied meaning in parameters;
- b) describe meta-theoretical background as a trace for parameter communication;
- c) comprehend connotation the parameter can convey as a psychological aesthesis.

Analysis of psychological motivation of parametrical expression reveals ways of meaningful usage of the latter, that is, to present what inspires the composer’s activity in modeling parameter’s flow (in other words, writing music) and what meaning this inspiration carries. For the musical meaning the classical definition of Leonardo B. Meyer is referred to (Meyer 1961: 43–50): musical meaning (in case of actual study – in psychological reality) arise when some change in the musical flow is evident. So analysis of motivation shows the ways a composer can think and produce changes in sonic impact through parametrical usage.

Meta-theoretical background analysis shows “useful” knowledge of music theory for the parameter in question, that is, knowledge, which can support (or trace) gestural aesthesis; delete or to put another name for psychological reality – parametrical connotation. These connotations should be analyzed in the third step of the first stage of analytical routine and types of connotation to be examined needs a little more explanation.

Connotation stands for the communication (delivery) of implied (through parameter’s usage motivation) content of gestural expression. This communicational delivery is between two subjects of music culture, namely, context and content (that is, the audience, in the widest sense, and the composer) and thus symbolic dimensions of connotation define the way the piece in question relates to the context. Namely, it shows whether it is a result of context influences, a closed system of inner relation of musical language (trace), or it is influential work, defining some sort of standards in musical culture (aesthesis). In Table 1 these dimensions are shown in relation to scientific tropes of several scholars. Michael Cherlin (Cherlin 1998) uses these differences to analyze the hierarchy of the structure of content reference. Rūta Stanevičiūtė-Kelmickienė (Stanevičiūtė-Kelmickienė 2015) with her value of meaning distinctions classifies different content construction technologies to be applied. Leonardo B. Meyer (Meyer 1997: 337–347) defines by “musical discourse type” the notion that he calls “stasis” or balance of three approaches of music comprehension in time line of music history; according to him, in every moment of history there is particular balance of all the three types of discourse related to music in question.

Dimension of connotational communication	Michael Cherlin Reference of content	Rūta Stanevičiūtė-Kelmickienė Value of meaning	Leonardo B. Meyer Musical discourse	Analytical inquiry of parametrical expression
<i>Poiesis</i> (from context to content)	Reference to topics outside music domain	Metaphorical meaning (affects, rhetoric)	Referential discourse	Expression of depiction
<i>Trace</i> (from content to content)	Reference within a work	Symbolic meaning (structures, combinatorics)	Absolute discourse	Intra-musical expression
<i>Aesthesis</i> (from content to context)	Reference between different works in music domain	Allegoric meaning (“divine music”, “sounding number”)	Transcendental discourse	Expression of genre

Table 1. Symbolic dimensions of connotational communication (Mickis)

Exploring the meaning of connotational symbolism in analytical routine, for the contextual *poiesis* of connotation it is supposed that music “depicts” some outer phenomenon, one of examples being program music of romanticism. **From the analytical point of view, poetical connotation helps to find out parametrical expression of depiction of non-musical things.** For the contextual trace (or to put another name according to J.J. Natiez, “neutral”), there is music, which relates to the context only indirect way – through knowledge and cultural habits. This is absolute music, the highest point in Europe’s music being classicism of Ludwig van Beethoven. Again, **analysis of neutral connotation should reveal the inner power of parameter’s expression, the forces, perceived by what Eugene Narmour calls the “automatic input system of the listener”** (Narmour



Example 4 also shows the ambiguous nature of meter: 4a and 4b show the most suitable and less suitable metrical stress, the clashing of parameters is shown in 4g (articulation vs. length) and 4j (articulation vs. repetition). In order to resolve such conflicts in analytical routine, the hierarchy of strength of parametrical expression is needed (see below). As mentioned, the most influential parameter for sonic impact is meter; other parameters in order of descending cognitive power are:

- 1) meter (including repetition),
- 2) rhythm,
- 3) tones,
- 4) register,
- 5) harmony,
- 6) articulation (“instrumentation rhythm”),
- 7) timbre (“instrumentation tones”),
- 8) tempo.

This taxonomy is based on the analysis of the insights of the author’s compositional practice and serves as a constant for helping to solve parametrical contradictions in cognitive analysis. Therefore, back to Example 4, in 4g the most suitable metrical beats are on the rhythm parameter (longer rhythm value); in 4f most likely metrical beat places are on A tones (instrumentation rhythm (articulation) fails in face of the meter structure). Now having to know conditions of the formation of meter (tools for meter expression), it is time to analyze the ideas meter could carry – that is, communicational qualities of meter’s psychological reality.

### 2.2. Motivation of meter’s cognitive impact

Analyzing meter structure in the first stage (i.e. communication in psychological reality), the motivation (*poiesis*) of meter (see Figure 2) stands for cognition of the prevailing at given time the scale of meter pulse (see Example 5 and explanation to it) and modulation between those scales levels, feature, commonly named as metro-rhythm. This feature of meter constantly motivates the listener’s attention to search for rhythm’s cognition basic and the shorter pulse values is, the sharper this aural attention (the lower graph in Ex. 5). If we compare how we listen and how we observe viewing the object details we bring the object closer to our eyes. On the contrary, in order to get the whole panorama we climb into the tower for a wider sight.

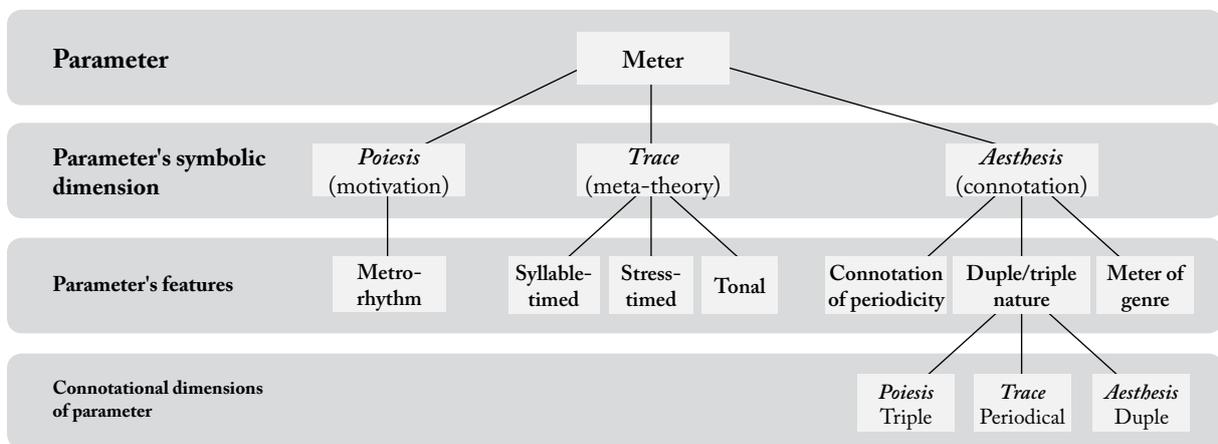


Figure 2. Communicational qualities of meter’s psychological reality (according to the author)



Example 5. Metro-rhythmical motivation of meter – connotational *poiesis* (supplemented example from Lerdahl and Jackendoff 1996: 47)

If we follow the rhythm flow in Example 5 a) from the beginning, the first onset C# hypothetically starts the stable pulse with the speed of the usual heartbeat of the listener (ca. 100–120 bpm), that happens before the music starts. When this onset is followed by second onset D, the latter immediately breaks this stability – the length of onset D is three octaves lower (that is three times shorter) and it is followed by the third onset C#, which should confirm implication realization, but is one octave higher than the second one (again, one time longer than second onset). This is exactly shown in the period configuration below the score and graph above, the latter showing the direction of metrical modulations: there is no stable pulse, and cognitive attention immediately lowers the pulse value (to sixteenth) to grab a new basis for psychological *poiesis*. The fourth onset E once again raises the pulse value of rhythm one more octave up, so no stability so far, but this time the third (C) and fourth (E) onsets implicate pulse, which is roughly compatible with initial tempo hopes (already described tempo hopes at the start of the example hypothetical sounding). This guess is confirmed by the last onset of first measure, establishing retrospectively two-times-triple meter, where strong beats (first C# and first E) are distinguished due to the length parameter and the second one (E) is more important due to a higher position in metro-rhythmical landscape. This setup of the metrical pulse is confirmed through repetition in second bar, which creates gestural trace or neutral state, which will be discussed very soon analyzing the inner aesthetical connotation of meter. The third bar demonstrates influence of metrical syncope on metrical scale modulation – it anticipates onsets (compare it with the beginning of the second bar where metro-rhythmical modulation on C is preceded by “swallowing” beat; shown in parentheses). The effect of syncope usage in the metro-rhythmical landscape layout is comparable to the role of adding harmonization chords in melody: harmonization adds a “third” harmonic dimension to two-dimensional sequence of tones in melody; and syncope adds a third dimension to two-dimensional metro-rhythmical setup (effect, extensively used in “canon-like” polyphony). The b) case of Example 5 demonstrates the intervallic quality of distance between scale levels: while a) part has only double ratios (metro-rhythmical octaves), here (in b.) speed ratio is 2:3, and that corresponds to the fifth interval. By motivating expression this way, a composer can achieve a more sophisticated delivery of his ideas – only the parameter of meter so far is engaged and other parameters are still pending. Thus a more varied scale modulation within the metro-rhythmical landscape is possible – possibility, successfully utilized in polyrhythms, where, for example, in *hemiola*, division by two concurrently runs with division by 3. This is exactly how the inner connotation of the meter parameter works and will be explained later in this paper. Now is the time for the meta-theoretical content of psychological reality for meter expression.

### 2.3. Meta-theory of cognitive meter impact

The versification of poetry serves as a meta-theoretical base for meter usage. In poetry, the linkage of words in strophes can be realized in three ways:

- syllable-timed way – counting syllables in line, as for example in the French language; musical analogy of establishing meter that way is *modus* rhythms;
- stress-timed way – counting intervals between stressed syllables; unstressed ones are fitted in between, as in the English language (for music it is meter in its classic sense);
- tonal way, where different sections are separated by intonation, especially in languages, where the height of pitch plays an important role in the establishment of communication (as in Chinese or African dialects). For music the latter option can be realized, for example, in cadenzas, where sections are indicated by a particular parametrical expression (for example, supported by the chords’ function of VII degree in the chord structure, or particular articulation, e.g. an accent or different length), or in *melisma* organum-style textures.

For demonstration of these theoretical constructs in score, let us examine the change of meta-theoretical basis – that is, ways of metering – in Léonin’s composition (Ex. 6).

Example 6. Example of meter type modulation (Léonin)

In Example 6, Section a. the organization of section meter is tonal, where every new meter section is defined by onset in a lower tenor voice. Rhythm actually does not matter for building up upper organum voice, except small caesuras after the third onset in the first and second lines, forming cadenzas on tenor and *mediante* tones. Sections differ in tonal organization, so there's nothing else to say about this first section. On the contrary, Section b. is built upon syllable-timed domain with the use of modes of modal rhythm. Actually, this example shows the way meter can imply aesthetical connotation of genre (see Meter of genre strain in Figure 2) and the character of melody realm in its broadest sense – hypothetically we can “hear” improvisation like a melodic flow in Section a. and hierarchical play of metro-rhythmical modulation (change between longer/shorter rhythmical values) in Section b. More analysis of meter’s psychological connotation is to follow in the next section of the paper.

#### 2.4. Connotations of the sonic impact of the meter

The *poiesis* of connotation, that is, the ability of meter to convey non-musical topics, is the simplest one – meter is about periodicity (of various kind, see inner connotation next), and periodical activity is crucial for the humankind time organization, starting with circular time metering (periodization in hours, minutes etc.), cyclical way mechanics can be realized and so on.

The trace of connotation, inner organization of the meter structure, comprises connotation (or move) in three directions. Two directions are defined by the nature of meter – it can be either duple or triple or a combination of both (such as compound meters, and that is metro-rhythmical hierarchy). The psychological content of this connotation is traced back to the famous notion of medieval mensural notation – perfect (by 3) and imperfect (by 2) division. Division by two gives more strict subordination – there could be only strong beat for the start and weak as its subordinate. In the case of three, the strong beat remains in the beginning of group, but the second and third beats can interchange their functions of weaker and weakest, or even can have an equal role as a metrical syncope (the weak beat is twice longer than the strong one). Referring to Example 7, exactly this inner power of meter expression is a connotational source of the meter structure. The first three onsets in the right hand of the first bar retrospectively (as shown in the third bar in parentheses) creates a setup with a “swallowed” second beat, creating metro-rhythmical modulation with return on the third beat (follow the red graph below the score while playing music in your head or on instrument). On the contrary, two-fold subordination of the eights in the left hand staff in the second bar is confirmed through continuation in third onset of quarter length (that is, eight value plus additive rest of the same value, shown in small notes above the lower staff).

Example 7. Gestural connotation of meter (excerpt from “Berniukas” by Mickis)

In Example 7 the graphs above the score show directions of meter’s connotation and it should be read as follows: the triple-kind nature of connotation is based on *poiesis*-trace-aesthesis dimensions (see connotational dimensions in Figure 2), and specifically for melodic realm in this analysis Eugene Narmour’s mnemonic is used. For connotational communication, accordingly, mR (move right – as a metaphor for melodic realm moving forward from the source) stands for tension building, mN (move NIL – “zero” movement without aim) stands for the static state of expression and mL (move left – aesthetical move towards relaxation) stands for the end of dramaturgy’s development in the musical section. To transfer this thinking device into the meter’s connotational field, some reliance on utilitarian function of music is needed.

Generally, expression of meter's connotation tend to be more "pop" when it is based on meter dividable by 2, while a more romantic musical flow is more usually based on triple division. Specifically for more world oriented music usage of polyrhythms is the norm and it should contain simultaneous use of both divisions. These examples show **aesthetical connotations** of the metre. And inner connotations of the metre are also defined by types of division:

- Triple division is a moving meter's expression right (mR), being *poiesis* for more fluent flow of melodic realm. In Example 7 it is depicted by the upper position of the lowest graph above staff system.
- Duple-based meter is a moving expression more towards aesthetical conclusion, which is moving left (mL). In Example 7 this direction is depicted by the lower position of the same graph.

These two-of-three activity directions of inner meter connotation correspond closely to the known notion of openness and closure, this time applied to the building and relaxation of metrical tension. This metrical dramaturgy occurs in the landscape of the third mN direction, as shown in Figure 3: interrelation of all three directions can be thought as detaching and coming-back gestures based on periodical meter setup.

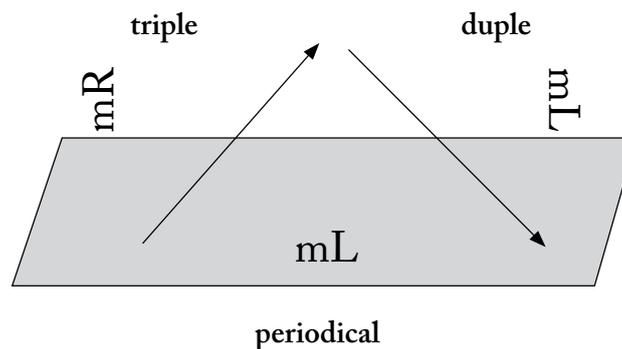


Figure 3. Types of meter in the inner-connotational landscape of movements

This periodicity is formed by the interplay of duple/triple meters on the second level of metrical hierarchy, as shown in Example 7 by upper gray brackets. As can be seen, repeated movements right and left (higher and lower graph positioning accordingly) are summed on the second level as a stable "no movement", and is supported by harmony changes (every bar gets different harmony chord). This mN state means communicational zero in regard to dramaturgy in the meter parameter. Such a low activity in one parameter leaves room for other parameters to an influent melodic realm flow – in the given example, gestures of rhythm and prolongation of harmony in melody line comes into play.

To sum up, the described psychological dimensions of communication shows the way the meter can be analyzed as a gestural expression – every change of described meta-structures and/or duple-triple-compound-odd counting, as well as non-metricity (as a new section in comparison to metrically organized ones) can be depicted in graphics as a gestural change. These "visualized sounding" of parameters can be used as an idea for music creation or performance or as a double-proof of ideas carried out through parameter expression.

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## Kognityvinis meloso parametrų įvertinimas: technologiniai aspektai

### Santrauka

Šiame straipsnyje sonorinis meloso poveikis klausytojui vertinamas muzikinės informacijos požiūriu. Į informaciją žvelgiama remiantis Jeano Jacko Nattiez koncepcija, kuri nurodo sėkmingam komunikavimui būtinas procesines dimensijas: tai 1) komunikacijos šaltinis (*poiesis*) – muzikinės žinutės pradžia; 2) komunikacinė medija (*pėdsakas*, angl. *trace*), palaikanti *poiesis* žinutę; 3) komunikacijos suvokimas (*aesthesis*), apimantis žinutės sklaidos rezultatus. Informacinio proceso vertinimui sukurtas originalus dviejų etapų analizės modelis, susiejantis išvardytas Nattiez *komunikacines* dimensijas su Guerrino Mazzolos *onionologinėmis* (gestinės ontologijos) muzikos realybėmis – psichologine, simboline, fizine ir gestine. Šios realybės parodo, kokia informacija dalyvauja simbolinėje komunikacijoje. Kiekvienai Mieczysława Tomaszewskio muzikinės veiklos fazei būdingos savos komunikacinių dimensijų realybės. Straipsnyje analitinis metodas taikomas tik *konceptinei* muzikos kūrybos fazei. Šioje fazėje komunikacijos *poiesis* vyksta psichologinėje realybėje, turinčioje išankstines muzikinių parametrų raiškos sąlygas. Pagal Mazzola, psichologinės realybės komunikacinė *poiesis* yra raiškos motyvacija, *pėdsakas* – meta-teorijos, o *aesthesis* įgyvendinama konotacijomis. Konotacijos analitiniame modelyje parodo muzikos turinio apibrėžtį konteksto atžvilgiu: konotacinė *poiesis* nurodo muzikos referavimą į nemuzikinius reiškinius; konotacinis *pėdsakas* apibūdina nereferencinę muzikinę raišką; konotacinė *aesthesis* atspindi nuorodas į stilistines paradigmas. Šiose konotacinės komunikacijos dimensijose turinys apibrėžiamas klasikine Leonardo B. Meyerio samprata: muzikinė prasmė atsiranda tik įvykus pokyčiui muzikinės realybės komunikacijoje.

Apibrėžta informacinė struktūra yra pirmojo analizės etapo tirties laukas, parodantis kompozitoriaus parametrų raiškos intencijas. Antruoju analizės etapu atskleidžiama, kaip šios intencijos (konceptinės fazės etapo *poiesis*) virsta muzika (konceptinės veiklos fazės *aesthesis*) pasitelkiant muzikines žinias (konceptinės veiklos fazės *pėdsaką*). Tokiam analizės tikslui pasiekti komponavimo fazės *aesthesis* laikas yra padalijamas (Mazzolos koncepcija) į tris dedamąsias: fizinį aktualaus muzikinio vyksmo *poiesis*, loginį muzikinių konstrukcijų *pėdsako* ir vaizduotės *aesthesis* – gestinės raiškos komponuojant muziką momentą. Gestas (taip pat pagal Mazzola) yra apibūdinamas kaip muzikinės egzistencijos komunikacija, kai: *poiesis* yra dabar skambantis fizinio laiko momentas; *pėdsakas* yra žinios loginiame laike, pritaikysimos fizinės muzikos egzistencijos pokyčiams sukelti; *aesthesis* yra tokių pokyčių išikūnijimas, naujasis muzikos fizinis būvis, įvykęs pritaikius žinias. Šitaip gestinė raiška susieja *poiesis* „dabartį tada“, *pėdsako* žinias „praeityje“ ir *aesthesis* „dabartį dabar“. Tokią informacinę struktūrą analizuojant antrajame analizės etape gaunami grafikai, atspindintys kompozitoriaus intencijų (apibrėžtų pirmajame analizės etape) gestinę raišką muzikoje. Analizės grafikai sudaromi kiekvienam parametrui, lemiančiam kognityvinį meloso sonorinio poveikio klausytojui įvertinimą. Vertinimo rezultatai gali būti naudojami muzikinių idėjų realizavimo patikrinimui ir komponavimo būdų „*know-how*“.

## A Spectral Approach to Melodic Development within a Sound-Sculpting Environment for Classical Guitar

### Annotation

This article centres on guitar sounds. Melodic aspects viewed in relation to the repertoire as well as morphological structuring principles developed in my recent research. Musical contours derive from manipulating consecutive, merged, and combined morphologies allied to shaping phrases formed by using archetypal or variant morphologies. The archetypal morphology of guitar sound – attack/resonance – forms the basis for classifying some of the techniques, while the others can be regarded as variants or extensions of the archetypal morphology.

**Keywords:** guitar morphology, sound-based and note-based music, melodic contour.

### 1. Introduction and about Guitar Morphology

This article will centre on guitar sounds. Leigh Landy tells us that “*sound-based* music typically designates the art form in which the sound, that is, not the musical note, is its basic unit” (Landy 2007: 17). When melodic development involves streaming *sound-based* rather than *note-based* material, a conventional means of analysis are not adequate for describing the music.

I will discuss some of my ideas. However, in order to support the theories a bit of a background is needed, especially as the musical contours used in my music derive from manipulating consecutive, merged, and combined morphologies allied to shaping phrases formed by using archetypal or variant morphologies.

Melodic aspects will be viewed in relation to the repertoire as well as morphological structuring principles developed in my recent research. Here I am using Landy’s definitions as a guide and moving Denis Smalley’s work on spectromorphology into the extended guitar techniques arena (Smalley 1896: 61–93). Therefore, sound sculpting on an acoustic instrument is to adopt a *sound-based* aesthetic to music, by composing, performing, improvising, or a mix of the three.

#### 1.1. Morphology

From my research content, I will concentrate on Guitar Morphology. The archetypal morphology of guitar sound – attack/resonance – forms the basis for classifying some of the techniques, while the others can be regarded as variants or extensions of the archetypal morphology. My definition of a guitar morphology is: “An unconventionally played procedure that produces morphologies containing a spectral content alternative to the conventional pitch-biased attack-sustain/decay model (Vishnick 2014: 5)”.

Let us have a closer look at the diagrams I am using to illuminate guitar morphology. They have two functions; however, this will be an overview:

1. Draw attention to the temporal evolution of spectra and pitch-to-noise content produced by playing particular techniques.
2. Show how the combining of morphologies results in the integration of spectral components, creating more complex sound qualities.

Musical potential of the techniques are examined in my compositions, which comprise studies that explore the juxtaposing and merging of morphologies. A table that indicates morphological and notational information has been devised as an aid to understanding guitar morphology. A typical morphology is based on two interlinked phases – an attack force followed immediately by a resonance that decreases in spectral richness as the sound decays. Although a single morphology can be regarded as a sound object in its own right, by combining successions and combinations of morphologies musical pieces are formed.

#### 1.2. Table of morphologies, archetype and variants

Twenty-one morphologies are set out in Figure 1 “Table of morphologies, archetype and variants”. Spectral content is used as a basis to order morphologies (from a pitch dominant spectrum to the noise-oriented, morphologies with a balanced mix of pitch and noise, like “snare drum”, occur mid-way). The morphological diagrams represent the progress of spectral content through time.

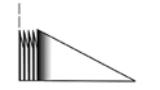
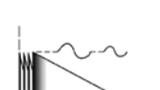
Alongside the morphological diagrams the notational symbols are used in the scores. Some are based on standard notation, while others represent timbral aspects, or a mixture of both. For example, from playing standard repertoire, a guitarist will be familiar with diamond heads for natural harmonics and cross-shaped

ones for percussive sounds. However, for more timbrally oriented resonances, graphic shapes are used to convey physical action and the notion of phases. In the morphological attributes column, a brief description of the relevant temporal phases is given for each technique, as well as an approximate duration.

Each morphology possesses a varying degree of pitch and noise. Shading is used to reflect the changing noise-to-pitch aspect: the blacker the shading the noisier the spectral content. For instance, when playing a multiphonic harmonic loudly (black to grey), the noise from the force of attack is followed immediately by a mostly stable, distinct and easily identifiable pitch content (grey to white).

Most of the morphologies consist of a single sound, executed on one of the six strings. However, three of the morphologies occur when more than one string is used simultaneously, the *snare drum* group, and *bottleneck (glissando)*, which both employ two strings, and *soundhole resonance (palm, fist, or thumb)* using up to six strings (See Vishnick 2014: 199–200).

Taxonomy	Morphology	Notation	Morphological attributes	Dynamic range
Natural harmonic		A 	Percussive attack, decaying spectral activity (higher harmonics have shorter resonance). Duration; 4" to 15".	Loud to very soft, (higher harmonics softer).
Multiphonic harmonic		A 	Percussive attack, decaying spectral activity (more complex than natural harmonics). Duration; 4 to 10".	Moderately loud, quicker to very soft than natural harmonics.
Bottleneck (plucked) <i>Reflected</i>		V 	Percussive attack, decaying spectral activity, refracted motion. Duration; 3" to 6".	Moderately loud to very soft.
Bottleneck (unplucked) <i>Reflected</i>		V 	Percussive attack, decaying spectral activity, refracted motion. Duration; 3" to 8".	

Taxonomy	Morphology	Notation	Morphological attributes	Dynamic range
Snap pizzicato (long)		A 	Percussive noise attack, long decaying spectral activity. Duration; 10" to 15".	Very loud to moderately loud.
Snap pizzicato		V 	Percussive noise attack, short spectral activity. Duration; 0.5" to 1". Rapidly terminated Snap pizz (long).	
Cross stroke <i>Extended</i>		V 	Two phases - multiple attacks, then decaying spectral activity. Duration; 5" to 15".	Moderately loud to very soft.
Cross stroke (active scordatura) <i>Reflected and Extended</i>		V 	Two phases - multiple attacks, then curvilinear or refracted decaying spectral activity. Duration; 5" to 15".	

Taxonomy	Morphology	Notation	Morphological attributes	Dynamic range
'Snare drum' (normal) <i>Extended</i>		V	Three phases - textural preparation - percussive noise attack (may be multiple), decaying spectral activity, noise release. 2nd phase duration 2" to 6".	Soft, always subtle loud to soft - soft to very soft.
'Snare drum' (lateral glissando) <i>Refracted and Extended</i>		V	Three phases - textural preparation, percussive noise attack (may be multiple), refracted decaying spectral activity, noise release. 2nd phase duration 2" to 6".	
'Snare drum' (slide glissando) <i>Refracted and Extended</i>		V	Three phases - textural preparation - percussive noise attack (may be multiple), refracted decaying spectral activity, noise release. 2nd phase duration 1" to 4".	

Taxonomy	Morphology	Notation	Morphological attributes	Dynamic range
Soundhole resonance (palm, fist, or thumb)		A	Percussive noise attack, decaying spectral activity. Duration; 3" to 6".	Moderately soft to very soft.
Soundhole resonance (buzz)		A	Percussive noise attack, decaying spectral activity. Duration; 3" to 6".	
Tapping, bi-tone (long)		A	Percussive attack, decaying spectral activity. Duration; 4" to 10".	Loud to soft.
Tapping, bi-tone		V	Short spectral activity. Rapidly terminated bi-tone (long)	
Tapping, mute (long) <i>Damped</i>		A	Percussive attack, decaying spectral activity. Duration; 4" to 6".	Moderately soft to very soft.
Tapping, mute <i>Damped</i>		V	Short spectral activity. Rapidly terminated mute tap (long)	

Taxonomy	Morphology	Notation	Morphological attributes	Dynamic range
Nut-side		A	Percussive attack, decaying spectral activity. Duration; 2" to 5".	Moderately loud to very soft.
Rapid mute <i>Damped</i>		V	Short spectral activity.	
Rapid mute (sixth string) <i>Damped</i>		V	Short spectral activity, plus harmonics resonances.	Moderately loud to very soft.
Pinch mute <i>Damped</i>		V	Short spectral activity, plus harmonics resonances.	

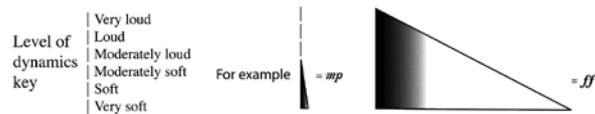


Figure 1. Table of morphologies

### 1.3. Spectral variety

Figure 2 summarises *spectral variety*; that is, the possibilities for shaping spectral content of morphologies. The way that pitch content is manipulated, whether left to resonate, refract, extend, or interrupt, facilitates the creation of morphological variety.

Attack, resonance, and termination function in various ways. For example, the attack phase can work as a downbeat, typically as in a *snap pizzicato (long)* morphology. Alternatively, the multiple attacks of a *cross-stroke* morphology can operate as an anacrusis. Morphologies terminate naturally when the sound reaches relative silence, or prematurely through performer intervention.

The pitch content of archetypal and variant damped morphologies is fixed, whereas the other variants are refracted glissandi, whose contours are either linear or curvilinear.

The pitch content of archetypal and variant damped morphologies is fixed, whereas the other variants are refracted glissandi, whose contours are either linear, in a direct line between two pitches – ascending or descending – or curvilinear. A curvilinear morphology may follow a uniformly curved path – *oscillation*, or be an irregular pattern – *undulation*. Refracted morphologies may be symmetrical or asymmetrical.

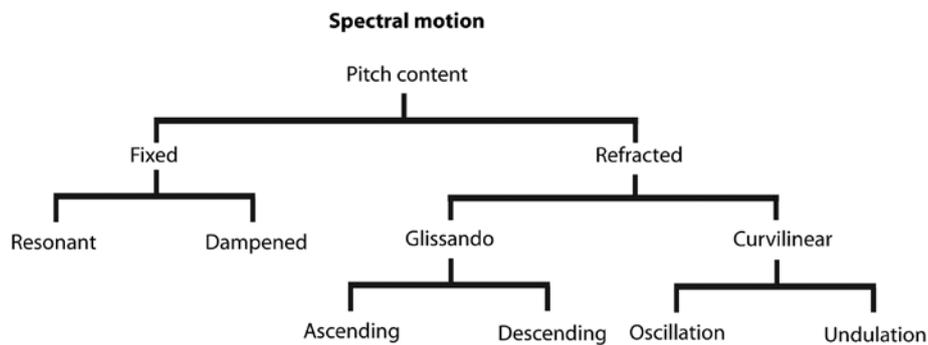


Figure 2. Shaping of spectral content

### 1.4. Morphological structures

As well as drawing attention to the nature of spectra and pitch-to-noise content, the main function of the following diagrams is to show *morphological structures*; how the combining of morphologies results in the integration of spectral components creating more complex sound qualities. In particular, the player is encouraged to work towards an awareness of the subtle intrinsic nature of resonances, where the spectral content of several morphologies is frequently blended, to the extent that the participating morphologies are not aurally separable. In order to interpret my studies, the player needs to be fully sensitized to the progress of spectral and morphological shaping.

The morphological diagrams highlight the following:

- how merging and superimpositions work, something that is not so apparent in conventional tablature-based or standard notation systems, which are more concerned with providing information on how to execute morphologies;
- such graphic representation shows the continuity of dynamic shaping more immediately than is possible with conventional notational indications like the Italian dynamic abbreviations.

### 1.5. Integrating morphologies

To help establish a basis for building compositional strategies, the archetype and its variants may be incorporated into more complex structures. For example, in Figure 3 multiphonic harmonic morphologies are used to illustrate three possibilities for connecting similar morphological types.

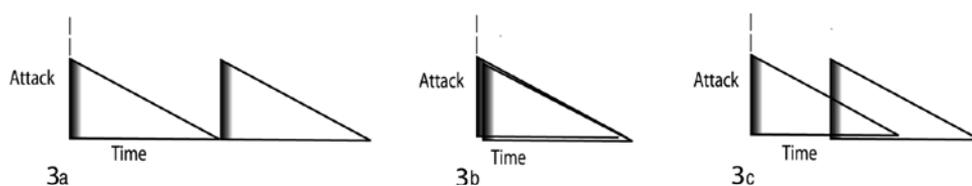


Figure 3. Consecutive and merged *multiphonic harmonic* structures – from relative separation to merging

Figure 3a shows relative separation – two morphologies are juxtaposed, the second starting near the termination point of the first decay period. Figures 3b and 3c show merged morphologies, composite sounds that arise when morphologies are superimposed. In Figure 3b the second morphology is initiated soon after the attack of the first, the resonances therefore merge. The second morphology in Figure 3c begins approximately two-thirds of the way through the first’s resonance; both morphologies are discerned. However, as an imbalance of dynamics is indicated, the final stages of the first morphology’s decay will be masked.

Merged morphologies may be synchronous, as in simultaneous attacks on two strings, or may occur at different times (as in Figure 3). Two main features of merging similar morphologies are firstly, closely related recurring sounds, and secondly, a contour of dynamic levels initiated by a varying attack force. Figure 4 shows a structure of natural harmonics morphologies with varying dynamic levels and degrees of merging.

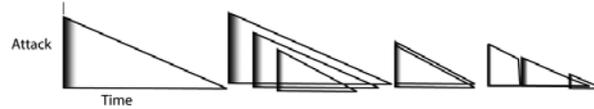
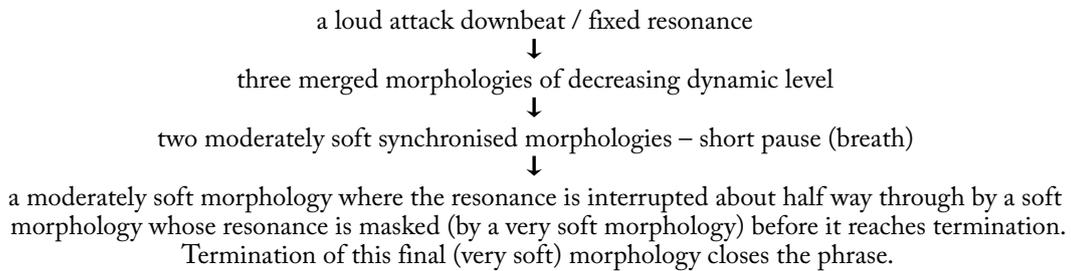


Figure 4. Natural harmonic structures

Here is an analysis of Figure 4:



Figures 5 and 6 are examples of configurations that could arise when *multiphonic harmonics* and *snap pizzicati* morphologies occur in consecutive, merged, and combined situations. Although they both share a percussive attack, *snap pizzicati* are more noise-orientated. Moreover, *multiphonic harmonics* and *snap pizzicato* (long) both have decaying spectral activity. Also, the dynamic ranges of *snap pizzicati* and *multiphonic harmonics* have a contrasting nature, and the duration of *multiphonic harmonics* is shorter than *snap pizzicato* (long).<sup>1</sup>

Figure 5 shows attack/resonance/termination of morphologies, spectral activity, timeline, and dynamic levels. The consecutive and merged morphologies are aligned under the relevant score extract, acting as a guide to spectral quality; a continuation of the ideas formulated in Figures 3 and 4.

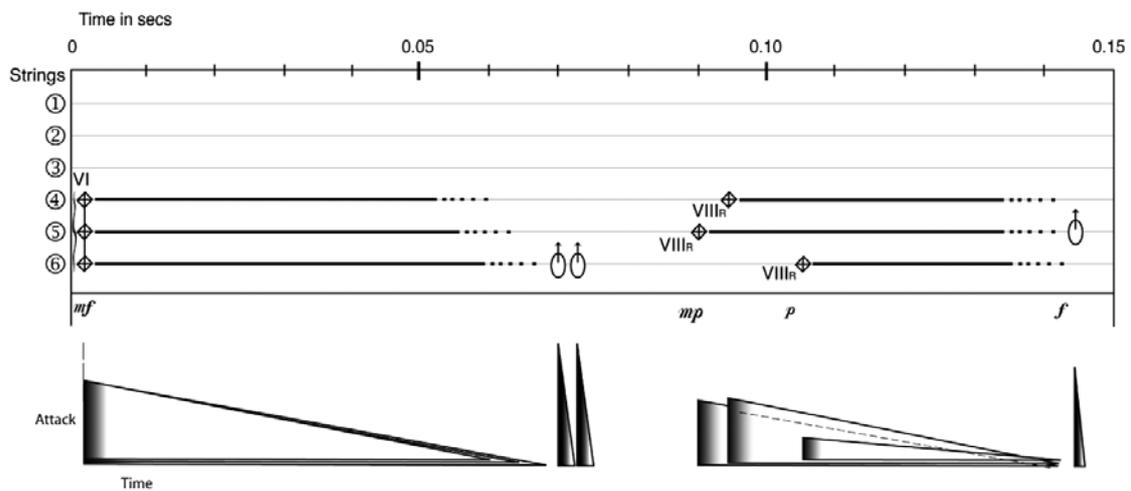


Figure 5. Consecutive *snap pizzicato* and merged *multiphonic harmonic* morphologies

<sup>1</sup> Note that all diagrams may be analysed in a similar fashion to Figure 4.

Figure 6 demonstrates a more complex situation, the combining of multiphonic harmonics and snap pizzicati resonances over a period of 15". The lower section shows the resultant superimposition of morphologies; resonances are combined.<sup>2</sup>

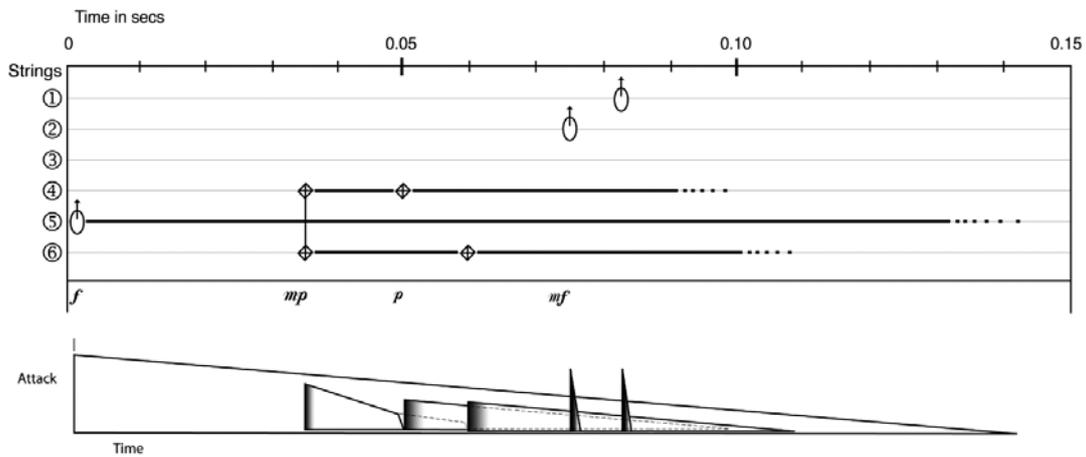


Figure 6. Combined *multiphonic harmonic* and *snap pizzicato* morphologies

Figures 6 and 7 represent the cumulative complexity of sound spectra, which includes layering extended technique on extended technique.

## 2. Melodic development

In my work compositional structures are developed through melodic aspects that manifest as a consequence of manipulating the placement of consecutive, merged, and combined morphologies. This is tied to the relationships that occur in shaping phrases, being aware of pitch relations, and exploring dynamic levels. Melodic contours of phrases are mostly derived from the archetypal or variant models; however, deviations to this are formed by manipulation of dynamic levels.

The perception of melody in my music is connected to sonic outcome in relation to pitch-based designs and interactions involving noise-biased morphologies. This sound-based dichotomy of capturing and maneuvering spectral content in respect to pitch and noise is used as a compositional tool. For example, the spectral content of a sound morphology is implied in the conventionally notated pitch/duration model. However, even in extremely detailed scores there are important aspects of the sound experience that conventional notation is simply not designed to capture. In order to convey the necessary information for viewing melodic development, I developed a notation for my studies that had to be liberated from the traditional pitch (vertical) and duration (horizontal) paradigm. The aim was to investigate moving away from this usual emphasis contained in the standard Western system and focus on what contributes to musical sound apprehension.

To help explain melodic structures and set a context, examples from relevant key repertoire and my compositions will be given where appropriate. For example, we can look at composers who have explored and developed existing acoustic characteristics. Although I will mention a few key works here, for further detail see sections 1.5.1, 1.5.3, 2.3.3, and 2.4 of my dissertation (Vishnick 2014: 51, 60, 146, and 154).

My work is aimed at helping guitarists to discover the fullest range of morphological variation by varying the intensity, durations, and the intervallic nature of pitch content; a system designed to help the performer learn to express spectral content in relation to the temporal placing of morphologies.

Part of the *notation in the repertoire* investigation in my research looks into how key composers indicate the actions necessary for conveying morphological detail in terms of spectral content and performance technique (Vishnick 2014: 121–155). By making relevant evaluations, all of the points discussed have an impact on my music – apprehension of sound, spectral content in the repertoire, relations to standard notation, compositional structures in relation to melodic contours, rhythmic strategies, and signs and symbols – in particular, actions involving the pitch/noise paradigm and their associations with spectral components.

<sup>2</sup> Listen to audio *sound example's, track's 56 and 57*, which are a realisation of Figure's 5 and 6 – <http://openaccess.city.ac.uk/4164/>

Taking the placement of spectral content as an example, the opening morphology in *Natural harmonics Study 1: Dynamics* is a merged pitch-based melodic structure. Here the player sculpts three morphologies on adjacent strings in the opening phrase, forming a contour that follows the archetypal attack/decay model through given descending dynamic levels. The opening morphology in this study, which is played on string 2 1.5" before the second on string 4, comes to a natural termination just before 5". A composite resonance occurs when the third morphology (on string 3), which is initiated after 3.5", merges with the previous two resonances (Vishnick 2014: 228); see Figure 7.<sup>3</sup>

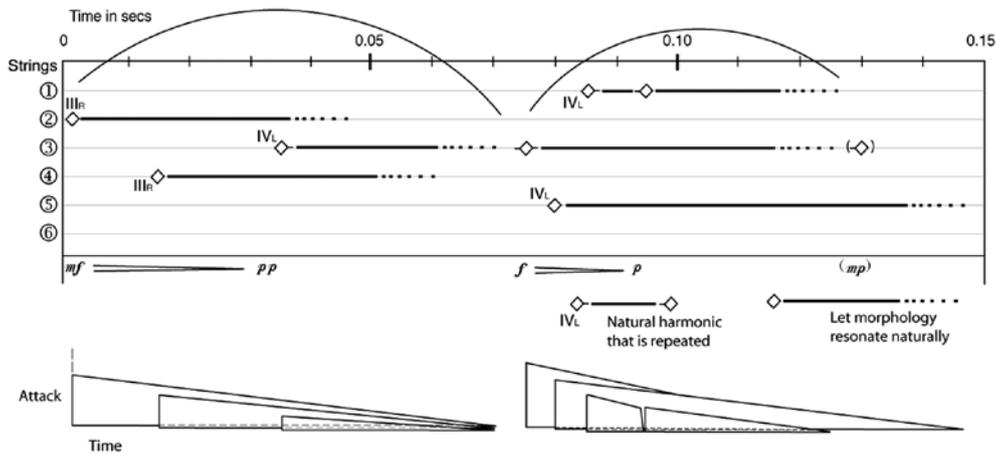


Figure 7. Natural harmonics study 1: Dynamics – page 1

Another example, which is more noise-based, is the opening phrase of the *Soundhole resonance Buzz study*. The player engages with phrases of varied durations, where the emphasis is on producing merged morphologies and composite resonances; delicate operations that involve both hands are needed. For example, a single interrupted harmonic morphology, on string 6, initiates the opening phrase. This is followed at 2" by the first of three merged *buzz* configurations that dovetail; string 6 using the right-hand finger *i*, followed by *a* on string 4, then *m* on string 5 (Vishnick 2014: 270–274).<sup>4</sup> Moreover, John Schneider includes a section on my *Bottleneck and Soundhole Resonances Combined Study* in his groundbreaking book (Schneider 2015: 241–242).<sup>5</sup>

A number of my studies combine two or three extended techniques. The intention is to start providing a repertoire for guitarists that centres on integrating extended guitar techniques. Again, the compositional focus is on forming relationships through combining consecutive, merged, and combined morphologies. Researching I have noted that three composers have combined two extended techniques in ways that link closely to my studies: Azio Corghi in *Consonancias y Redobles* (1974), Rolf Riehm in *Toccata Orpheus* (1996), and Helmut Lachenmann in *Salut für Caudwell* (1977). (See Vishnick 2014: 82, 92, 118, and 131.) However, it would appear my studies that combine three extended techniques are unique to the repertoire. The result can be an overlaying of three extended techniques; the *Harmonics, 'snare drum' and pinch mute combined study* have a significant amount of pitch content.<sup>6</sup>

In my studies the emphasis is on phrase construction, which can be seen as incorporating the development of melodic content of combined morphologies by involving various ways of layering extended techniques; devices include the superimposition of similar and different morphological types resulting in a more polyphonic texture, where phrases are based on the archetypal, variant, and deviations to the archetypal and variant models. In the performance domain, this also means developing the technical skills necessary to deal with melodic contours that occur concurrently. Another of the many examples can be found in the *Soundhole harmonics, bi-tones, and nut-side combined study* (Vishnick 2014: 313, and 399–403).<sup>7</sup>

<sup>3</sup> Ibid. Audio *Sound example, track 19* is a realisation of Figure 7.

<sup>4</sup> Ibid. Audio *Sound example, track 60* is a realisation of the *Buzz study*, opening phrase.

<sup>5</sup> Schneider has recently revised *The Contemporary Guitar*.

<sup>6</sup> Ibid. Listen to audio *Sound examples, track's 96, 97, 98, and 99*.

<sup>7</sup> Ibid. *Sound example, track 100* is a performance of the whole study.

### 3. Final comments

To summarize, I have sought to show how the examination of the morphological approach to apprehending spectral content adopted by certain composers who have used extended guitar techniques connects to the music composed for my research. The results of my findings have led to theorizing a possible methodology, which is based on the interconnectedness of experiencing and observing guitar morphologies.

For the performer, this means gaining theoretical knowledge through studying guitar morphology and morphological structures, and learning about notation systems. Composers can look at pushing the existing performative boundaries of extended techniques by exploring combinations of the physical and acoustic aspects of producing particular guitar morphologies. For me, this can be seen as cultivating the work of some key groundbreaking composers, such as Brian Ferneyhough's *Kurze Schatten II* (1983–9) and Arthur Kampela's *Percussion Studies I, II and III* (1995–7) for physicality, Philippe Durville's *Mouvement apparent* (1988) and Tristan Murai's *Tellur* (1977) for maintenance of sound, Giacinto Scelsi's *Ko-Tha - "A Dance of Shiva"* (1967) and Lachenmann's *Salut für Caudwell* (1977) for resonance, Riehm's *Tocatta Orpheus* (1990) and Corghi's *Consonancias y Redobles* (1974) for a fusion of physicality and resonance (Vishnick 2014: 118–120).<sup>8</sup> However, it should be noted that my scores also contain a mixture of all three aspects, resonance, physicality, and maintenance of sound (Vishnick 2014: 213–315).

My pictorial-based tablature notation is the result of an exploration into developing an alternative to the standard five-line stave system, aspiring to produce lucid and uncluttered scores. Moreover, until now there has been no contemporary guitar literature that seeks to comprehensively examine performance, improvisation, pedagogy, and composition in relation to guitar morphologies; indeed, propagating the values of the morphology of guitar sounds appears at present to be a distinctive endeavour.<sup>9</sup> However, this alternative view of how to play the guitar, offers the musician a different way of apprehending guitar music.

This research does not replace the importance of existing work, its contents are aimed at broadening current thinking. The intention has been to provide a thorough understanding of the morphology of guitar sounds. However, there is much future work to be done in this area. For example, continue to tackle the thorny issue of showing vertical pitch content within a pictorial-based system, develop a sound-based rather than note-based aesthetic, and investigate the lack of terminology for understanding and categorisation of sound based music.

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## Melodinė plėtotė spektriniu požiūriu klasikinės gitaros garso apdorojimo aplinkoje

### Santrauka

Straipsnyje gilinamasi į klasikinę gitara išgaunamą garsyną. Pirmiausia paaiškinama vien garsine medžiaga grįstos muzikos kūrybos samprata, trumpai aptariamas istorinis autoriaus idėjų raidos kontekstas. Toliau kalbama apie gitara išgaunamų garsų morfologiją ir kaip ji siejasi su jo muzika, ypač išskiriant melodinį kontūrą. Melodiniai aspektai aptariami atsižvelgiant į repertuarą ir morfologinės sandaros principus, suformuotus autoriaus pastarųjų metų tyrimuose. Skirtingos garso išgavimo technikos klasifikuojamos remiantis archetipinės gitaros garso morfologija (ją sudaro ataka ir garso rezonansas); kitos technikos gali būti laikomos šios archetipinės morfologijos variantais ar vediniais. Straipsnyje svarstoma, kaip garsinio rezultato suvokimas priklauso nuo garsų aukščiais pagrįsto dizaino ir skirtingų garso morfologijų sąveikų, įtraukiant ir triukšmus. Dichotomija tarp spektrinio turinio fiksavimo ir manipuliavimo (tiek apibrėžto aukščio garsų, tiek triukšmų) autoriaus pjesėse pasitelkiama kaip kompozicinė priemonė. Pavyzdžiui, įprasta notacija užrašytame garso aukščių–trukmių modelyje spektrinis garso morfologijos turinys yra numanomas. Tačiau net labiausiai detalizuotoje partitūroje esama svarbių garsinio patyrimo aspektų, kurių tradicine notacija tiesiog neįmanoma užfiksuoti. Siekdamas perteikti šią informaciją, savo naudojamose notacijose autorius turėjo atsiplešti nuo tradicinių garso paradigmu – aukščio (vertikaliosios) ir trukmės (horizontaliosios). Tyrimo tikslas buvo atitolti nuo standartinei Vakarų sistemai įprastų perskyrų ir sutelkti dėmesį į tai, kas praturtina muzikinio garso suvokimą.

Analizuojant melodines struktūras buvo pasitelkti pavyzdžiai iš kanoninio gitaros repertuaro kūrinių ir paties autoriaus kompozicijų; jo pjesėse atlikėjas parodo platų morfologinių variacijų spektrą keisdamas dinamiką, trukmes, intervalinę naudojamo garsyno sudėtį. Visa tai iliustruojama schemomis ir natų pavyzdžiais, papildoma nuorodomis į garso pavyzdžius. Autorius aptaria žinomų kompozitorių sukurtas išplėstines gitaros technikas ir sąsajas su tyrimu. Apžvelgdamas įvairias gitaros morfologijas, formuluoja teorijas ir tyrimo metodus. Taip pat užsimenama apie pastangas sukurti piktogramomis grįstą tabulatūrą, kaip alternatyvą įprastai penklinių sistemai. Glaustai pristatoma darbo apimtis ir tolesnių tyrinėjimų galimybės.

<sup>8</sup> It is understood by the author that resonance, physicality, and maintenance of sound aspects may be considered mutually inclusive; they are mentioned here in terms of dominant features.

<sup>9</sup> To the best of the author's knowledge.

# 2

ESTETINIAI, STILISTINIAI | AESTHETIC, STYLISTIC  
IR SEMANTINIAI | AND SEMANTIC  
MELODIJOS ASPEKTAI | ASPECTS OF MELODY



## Tōru Takemitsu's Music and the Aesthetic Values of Japan

### Annotation

According to Nuss (2002: 86), Takemitsu, similarly to such literary figures as Yasunari Kawabata and Kenzaburo Ōe, “achieved a contemporary voice that transcends geographical and stylistic boundaries and, in effect, speaks Japanese to the modern world”. Some scholars found aspects of Japaneseness in most evident iconic signs, such as the instruments used (Ohtake 55–59) or inspirations from Japanese gardens (ibid. 23–4). Others (like Koozin 1991 and 1993; Koh 1998) noticed some aspects in harmony and narrativity. However, more contextual and systematic definitions of how this Japaneseness is manifested are still lacking. In this paper, I will try to connect Takemitsu’s musical messages with philosophical and aesthetical contexts. Invoking some elementary semiotic terms and reductions elaborated in Greimas’ works and applied to analysis of music by Eero Tarasti (1994) I will try to examine what kind of modalities and narrativity are characteristic of Takemitsu’s music and how they are related to traditional aesthetic values of Japan.

In this paper I will use only a few of the most important terms of Greimasian semiotics that, to our mind, will suffice to realize our aims. These are

- a) **subject and object** that represent the fundamental binary opposition manifested in existence and texts. It is closely related with further polar definitions such as consciousness and objects, immanence and transcendence, me (we) and other, culture and nature etc.;
  - b) **modality** that could be defined as the state, situation, attitude or value emerging from the relationship between subject and object (Greimas 1989: 231–33, Greimas & Courtés 1979: 230–32). In philosophical, aesthetical and musical texts, we can find manifestations of modal utterances of conjunction (S’O) and disjunction (S’O), being and doing, harmony and disharmony, belongingness and separability, between subject and object or human being and cosmological surrounding;
  - c) **semé** that could be defined as a minimal meaningful unit of the discourse (for example, a recognizable motive in music).
- Keywords:** aesthetics, modality, narrativity, subject and object, ambiguity.

### Influences

We can trace various influences in Takemitsu’s aesthetics and techniques of composition. However, at the same time from the early pieces, such as *Lento*, *Uninterrupted Rests*, *Litany* or *Requiem*, certain characteristics of Takemitsu musical sensibility are evident, such as the predominance of slow tempos, melancholic moods, and drifting melodic movements rather than developmental ones (cf. Burt 2001: 29, Narazaki: 76). Throughout his life, the music of Debussy and Messiaen was of particular importance for Takemitsu. Debussy-like “pan-focused” textures can be found in the majority of Takemitsu’s pieces for orchestra; a respect for Debussy is also expressed in aesthetic considerations (see Takemitsu 1995: 110) and by quoting him in *Quotation of Dream*, *Sea Sea Take me* or *And Then I knew ’Twas Wind*. Messiaen-like modes and static harmony can be found in many pieces as well (See for details Shomowitz), although, Takemitsu claimed that he was not familiar with Messiaen’s system of harmony at the very beginning of his activities (cf. Burt 2001: 34–5). Beside the adaptations of technical aspects, Takemitsu found in their music much more fundamental affinities with Japanese aesthetic sensibilities. According to him (1995: 96), something close to Heian handscroll painting or Nō theater organization of space and time, also “comes out of the tradition and musical spirit of Debussy and Messiaen”.

After 1960, Takemitsu and other Japanese composers were influenced by John Cage’s ideas. Cage aesthetics demonstrated an affinity to and relevance of Japanese ways of thinking and encouraged composers to look for their adaptations in contemporary music. Takemitsu wrote “in my own life ... I struggled to avoid being “Japanese”, to avoid “Japanese” qualities. It was largely through my contact with John Cage that I came to recognize the value of my own tradition” (Takemitsu in de Ferranti 2002: 51). Beside many points in common regarding aesthetic considerations, Cage’s more direct impact can be found in some aleatoric and graphic scores of the 1960s (see Burt 2001: 92–106). At the same time, Takemitsu adapted elements of dodecaphonic constructivism and serialism. These elements, as Burt (2002) shows, remained important until the last pieces such as *Spirit Garden* or *Dream/Window* in which motto-motives or sequences of the chords are constructed in a Webernian manner. In addition, following tendencies of avant-garde music, Takemitsu expanded the use of instrumental techniques (see Burt 2001: 132–153).

Xenakis, Lutoslawski and Ligeti also could have affected orchestral textures of some of Takemitsu pieces, especially of the middle period (cf. Ohtake 13, Burt 2001: 115). According to Takemitsu, the music of Xenakis is very expressive, despite its extremely intellectual construction. From him he lifted ideas of conjoining in

compositions two radically different approaches – that of “dream” and “number” realized in pieces like *A Flock Descends into the Pentagonal Garden* (cf. Takemitsu 1995: 97–126). Rigidity of “number” should be conjoined with “complexities of the dream” (Takemitsu 1995: 102); “dream” as free choices to be based on “number” – that is, rigid harmony and pitch operations. However according to Burt (2002: 156–7), it is very hard to find in Takemitsu’s music the formal procedures that he professed.

The music of the 1960s is also characterized by “looking to the Eastern mirror”, i.e. adapting aspects of Japanese aesthetic paradigms and using Japanese instruments (see Burt 2001: 110–128). In aesthetic writings, metaphors of the “musical garden” and “strolling in the garden” (cf. Takemitsu 1995: 95, 114) gained a crucial importance. On this aesthetic background, previous techniques and influences were integrated. It resulted in Takemitsu’s recognizable musical style that remained until the last pieces.

Takemitsu’s music from the 1980s is often described as a “sea of tonality” (cf. Burt 2001: 175). In this period, many previous avant-garde conventions were abandoned, the orchestral textures are not so dense, and clear melodic lines and elements of tonal harmony are often used, although, dodecaphonic constructivism, extended techniques of instruments, and elements of theater remained important. Of later Takemitsu, it is also characteristic that self-quotations of melodies or harmonic segments are used in many pieces (cf. Burt 2001: 190–215); also the quoting of other composers, such as Debussy, Berg, and Bach.

Despite the variety of the techniques of composition, in the narrative structures of music we can find many affinities between early and later pieces. These are likely to stem from some fundamental existential and aesthetical values.

### Aesthetics

Takemitsu wrote several essays in which he discussed the issues of the identity of Western and Japanese cultures, creative phenomenology, modalities, and technical aspects of his music. Considerations about the cultural identity of Japan illustrate his eclectic orientation:

A mirror is broken and in each shattered piece, different faces are reflected. No longer can you view your image in a single mirror. And a shattered mirror cannot be reassembled. ... Modern Japan has spent a long time trying to discover itself in a huge Western European mirror, but now that some time has passed, it should try to see itself in those countless fragments of the mirror (Takemitsu 1995: 70).

As distinct from many Western composers who considered themselves opponents of tradition, Takemitsu sometimes comments from a traditional Japanese attitude about the inability to transcend the tradition, and about the impossibility of radical novelty. The quote below also reflects his attitude towards adaptations, characteristic of the forming of his style:

I am not concerned about thinking thoughts that no one else might ever think. I just want to make sure that while I am thinking those thoughts that anyone might think, I am doing it in my very own way. Therefore, I think I don’t mind if things are not always my own (Takemitsu 1995: 13).

In addition, the “expressing subject” and traditional ways of listening based on the Romantic paradigm are questioned. According to him,

There is something about this word “expression”, however, that alienates me: no matter how dedicated to the truth we may be, in the end when we see that what we have produced is artificial, it is false (Takemitsu 1995: 3) ... Musical imagination, so long in the grips of self-expression, hears these sounds only as a means to expand self-expression (ibid.: 85).

Similarly to Debussy, instead of “expression”, nature becomes a surrounding, which “calls out” and from which musicality should emerge:

In writing, I frequently use the word “nature”. For me it is a kind of calling out to the world (Takemitsu 1995: 86) ... [R]ather than on ideology of self-expression, music should be based on a profound relationship to nature – sometimes gentle, sometimes harsh (ibid.: 5).

In Takemitsu’s other formulations, we find something very similar to Buddhist or Nishida Kitarō’s as well as Heidegger’s definition of the human/artist as a focus that belongs to the field. Accordingly, “expression” should stem from this belongingness in which composer and sound “merge”, thus:

Expression never means separating myself from other things ... To me the world is sound. Sound penetrates me, linking me to the world. I give sounds active meaning. By doing this, I am assured of being in the sounds, becoming one with them. To me this is the greatest reality. It is not that I shape anything, but rather that I desire to merge with the world (Takemitsu 1995: 12–13).

However, in belongingness there is an aspect of irresolvable tension between the subject and object and other polarities. Consequently, Takemitsu's fundamental definition of artistic activity is one of "confronting silence", keeping this tension:

Confronting silence by uttering a sound is nothing but verifying one's own existence. It is only that singling out of one's self from the cavern of silence that can really be called "singing". That is the only "truth" that should concern artists, otherwise we will never really face the question of art's reality. ... It is in silence that the artist singles out the truth to sing or sketch. Moreover, it is then that he realizes his truth exists prior to everything (Takemitsu 1995: 17).

Silence here is invoked as a metaphor of totality to which human existence belongs; whereas "confronting" could be considered as a span of self and other. In such "confronting" the self is rather insubstantial. Takemitsu found affinities between his poetics and the Japanese novel (*shishōsetsu*). This is contrasted to expressionist values:

The distance between the German *Ich-Romanen* and the Japanese *shishōsetsu* (A Japanese novel in which the author is the central figure; similar to the German *Ich-Romanen*) may also be seen between the Western music-as-expression and the traditional idea of music-as-ceremony. ... I wonder if the deep impression of the *shishōsetsu* might not be that of the beauty of denial of self. It impresses, not by confession, but by the restraint in denying one's self, which, while it limits and narrows the world, is at the same time emancipating (Takemitsu 1995: 11).

Similar ideas can be found in Takemitsu's considerations of musical syntax. The morphological category of *ma* that manifests the removal of the subject "from its position of primacy" is invoked here (Takemitsu 1995: 51). Takemitsu found the manifestations of *ma* in traditional Japanese performing arts such as *nō*, *biwa* and *shakuhachi* music (cf. Takemitsu 1995: 56–76, 96). Our next question is how Takemitsu's aesthetic stance is reflected in his music.

### Textures

Spatial stratification is characteristic of Takemitsu textures. Especially, it can be found in pieces for orchestra from the middle or later periods. Similarly to Debussy, in orchestral textures Takemitsu often used several strata, usually from two to four that are individualized by harmony, rhythm, instruments or melodic movement. In vertical accumulations of these strata, we usually can distinguish foreground and background instrumental groups and harmonic structures. Such stratified textures are characteristic of almost all orchestral pieces to give just a few examples from various periods of the oeuvre:

- *Green*, especially sections 5 and 6 (Ex. 1);
- Many places of *Dream/Window* (Ex. 2);
- *Nostalgia*, where two whole tone scales differentiated by registers and instrumentations are used in motto-motive;
- *How slow the wind*, with characteristic textural differentiation between the motto-motive and the harmonic field that surrounds it; this differentiation is especially evident in the very end of the piece where on the background of the euphoric resolution into *Des-dur*, a falling chromatic motive of percussion is superimposed (see illustration 21 below).
- *A String Around Autumn* (1989), especially section S (Ex. 10);
- *Rain Tree Sketch I* (1982) and *II* (1992) for piano, with characteristic differentiations of registers and harmony in the very beginnings of the pieces;
- *Archipelago S* (1994);
- *Music of Tree* (1961);
- *Textures* (1964);
- *November steps* (1967).

Such textural distributions were called by Takemitsu "pan-focus" or "musical garden". It was affected by Debussy's music which, according to Takemitsu, "is also very spatial" and is unique in that "rather than emphasizing one principle theme it displays multiple aspects of sound" and "combines several things at the same time" (Takemitsu 1995: 110; cf. also Takemitsu in Burt 2001: 98, Ohtake: 7). Another source of inspiration for such textural distribution was traditional Japanese gardens. Groups of the instruments – woodwinds, strings, brass and percussion were symbolically related with certain elements of gardens, such as grass and flowers, trees, rocks, sand and earth that have different durations of existence. Shorter melodic segments performed by foreground instruments such as woodwinds or high strings (often doubled by harps or melodic percussion) are compared with rapidly changing mobile forms of short-lived grass and flowers. Slower background groups are performed by brass (often with *sourdines*) – with trees or rocks; whereas long sustained chords of double

Example 1. *Green* for orchestra, bars 29–32  
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bases (playing silent low tones or flageolets) – with “enduring and stable sand and earth” (cf. Takemitsu 1995: 95–96). Background and foreground instrumental groups constantly interchange. This interchange is compared with the perspective of the observer that changes in time. Spatial stratification is also increased by physically distancing the groups of the orchestra as in *Dream/Window*, *November Steps*, *Dorian Horizon* or *Gemeaux*. We can find here affinities with Debussy’s ideas of decentralization and regrouping the orchestra.

One more aspect of stratification, noticed by Nuss (p.209) and compared with Gagaku’s orchestral textures, is “end segmentation” in which the extreme registers, the highest and the lowest are simultaneously presented.

Example 2. *Dream/Window* for orchestra, bars 7–9  
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It can be seen, to give just a few examples, in the very beginning of *How Slow the Wind*, *Dream/Window* (section R), or in the very end of *Rain Tree Sketch I*. Here again we find similarities with Debussy's span of extreme registers, especially characteristic of piano music.

The textural stratification and plurality of sound layers is characteristic of Takemitsu's musical space. However, when we listen, this music does not sound as a dissonant plurality of events that shade one another. There are certain aspects of tonal organization that homogenize and balance this plurality.

### Harmonic Preferences

As mentioned, Takemitsu’s harmony could have been influenced by Messiaen’s system of modes of limited transposition (see discussions in Burt 2001: 32, 42, Ohtake 79–80, Shlomowitz 177–188) and Dorian Jazz harmonies (see Burt 2001: 86–89). Very often, Takemitsu used transpositions of more or less the same pitch class sets (see Burt 2001: 70). Thus, similarly to Debussy or Messiaen, local teleological harmonic sequences are possible, but they are not long. Thus, “[I]t seems that Takemitsu felt an affinity with Debussy and Messiaen, in the way that their melodic and harmonic structures were liberated from any functional obligation” (Narazaki: 77).

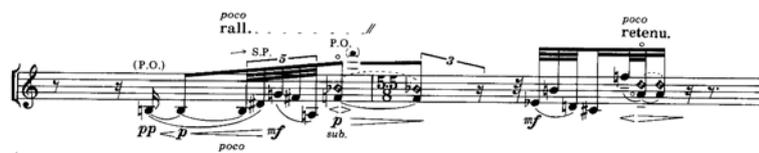
Besides Messiaen’s mode II, most important for Takemitsu harmonic structure, which appeared in early pieces like *Distance de Fée* and remained important until the last ones, according to Burt’s set analysis definition, is 7–33 pitch collection (cf. Burt 2001: 34, 43, 67, 71). It can be simply defined as a whole tone scale in which one sound from another tone scale is inserted. In the pieces based on the technique of serialism, such as *Uninterrupted Rests* (see Burt 2002: 158–160) and *Hika* (ibid., 163–164), the same structures of a whole tone scale + 1 and the remaining five sounds out of 12 as a complimentary unit, are extensively used. However, most often not only one but also two or three sounds from a complementary whole tone scale are used as harmonic segments or diachronically intertwined in melodic lines.

The whole tone scale was extensively used by Debussy too; because of the absence of semi-tones, it is the most integrated, balanced, and has the least possibilities of a tonal hierarchical scale. In such a scale, an “arabesque-like” melodic movement can be best realized. However, in Takemitsu, one or several pitches from another whole tone scale introduce a split to this integrity and homogeneity. Thus, most important for Takemitsu’s harmonic structure is that it remains semantically ambiguous: integrity is at the same time cleaved, fragmented and disunited. In Takemitsu, as Koozin (p. 138) noticed: “[O]ctatonic, whole-tone, and other referential collections, which suggest the influence of Messiaen and Debussy, are used to generate new sonorities that are rich in mystery and ambiguity”. We will find a similar ambiguity in Takemitsu’s melodies.

The harmonic structures of whole tone scale + 1 or + 2–3 pitches from a complementary whole tone scale can be found in referential chords in pieces like *Spirit Garden*, *Dream/Window*, or in the melodic structures of *From far beyond Chrysanthemums and November Fog* (1983), *I Hear the Water Dreaming* (1987), or *Far Calls. Coming Far!* (1980) (Ex. 3–6).



Example 3. Referential chords of *Spirit Garden for Orchestra* (Example is taken from Burt 2002: 165)



Example 4. Violin melody of *From far beyond Chrysanthemums and November Fog* for violin and piano, bars 77–78



Example 5. Harmonic structures of *Far Calls. Coming Far!* for Orchestra (Example is taken from Ohtake, p. 35)



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Example 6. Motive from *I Hear the Water Dreaming* for flute and orchestra (Illustrations from Burt 2002: 169)

This harmonic structure distributed as chords and their transpositions can be found in various instrumental groups. Pitches of these groups are sometimes summarized in celesta parts, like in some sections from *Green*, *To the Edge of Dream* or *Vers, L'Arc-en-Ciel, Palma* (see Ex. 7–9). In many cases, not all the 6, but 3 or 4 sounds from the whole tone scale are joined with several sounds from a complementary whole tone scale. Often, this forms diatonically sounding harmonic segments, like in the example from *To the Edge of Dream* below.

The image shows four staves of musical notation for celesta parts. The first two staves are labeled 'Section 1' and 'Section 2'. The first two staves are labeled 'Section 6' and 'Section 9'. The notation includes various dynamic markings such as *f*, *p*, *mf*, and *ff*, and includes some performance instructions like 'p dolce'.

Example 7. *Green* for orchestra. Celesta's parts.  
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The image shows three staves of musical notation for celesta parts. The first two staves are labeled 'Section I' and 'Section N'. The first two staves are labeled 'Section Q'. The notation includes various dynamic markings such as *p*, *mf*, and *pp*.

Example 8. *To the Edge of Dream* for guitar and orchestra. Celesta's parts  
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The image shows one staff of musical notation for a celesta part. The notation includes various dynamic markings such as *pp*.

Example 9. *Vers, L'Arc-en-Ciel, Palma* for guitar, oboe d'amore and orchestra. Section N. Celesta's part  
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Usually, sounds of a complementary whole tone scale mode are distributed in various registers and groups of instruments; thus, they cannot be so easily localized. (See Ex. 2 above; also *Entre-temps* (especially bars 32 and 65) or *A String Around Autumn*, especially strings of section P.) The whole tone scale functions as a kind of harmonic background on which various foreground melodies, collections of pitch or sequences of chords, are superimposed. More diatonic melodies on this background can be found in later pieces (see for example the viola solo part from *A String Around Autumn*).

Dense harmonic verticals are characteristic of the middle period of Takemitsu's orchestral pieces such as *November Steps*, *Asterism* or *Gemeaux*. However, they are composed of "modal fragments" (Narazaki: 79) and are rather "pan-tonal" than "a-tonal" (Burt 2001: 115). According to Burt (2001: 107), "closer examination of the various strata combining to produce this "panchromatic" texture, however, reveals that they are not always themselves as "atonally" conceived as the overall effect might suggest". Harmonic verticals are usually constructed out of several modal strata – pentatonic, diatonic, whole tone + 1; in the majority of cases these strata are also individualized by instrumentation. Often, one harmonic stratum is highlighted by dynamics and instrumentation; whereas the other instrumental groups perform complimentary background harmonies (see Ex. 1 above).

Intensive chromatic accumulations, characteristic especially for *November Steps* and other earlier orchestral pieces are often "immediately dispersed by the removal of two or three of the semitones" (Narazaki: 80); the result is momentary fluctuations between intensive chromatic and diatonic harmonies. In pieces after 1980, there are not so many heterogeneous modal strata, chromatics is not as intensive as in earlier pieces, and textures are thinner; however, complementariness or poly-focus in harmony and orchestration remains important.

As distinct from Messiaen, Takemitsu uses his modes not strictly but rather “referentially” – the exact collection of pitches is not so important, but the “mode’s presence is nonetheless felt” (Shlomowitz: 188). Shlomowitz’s considerations about the harmony of *Quatrain*, could be to some degree applied to other pieces as well: “If we imagine a passage that contains twenty pitches, in which only one of the pitches cannot be accounted for as being in a single whole-tone mode, clearly, we are still going to identify this passage as having whole-tone flavour” (ibid.). In a similar way, although there are many sound strata sounding together and deviations from exact pitch collection, we can hear the predominance of the above discussed complementary and “cleaved” scales in almost all of Takemitsu’s pieces.

Takemitsu’s saturated harmonic space and transpositions that produce new chords that are “close, but not quite” so was compared by Nuss (2002) with the “phoenix effect” produced by shō of the Gagaku ensemble. Shō in Gagaku creates a constant harmonic background for foreground melodic movements. The dynamic gesture of shō, with the characteristic constant waves of crescendo and diminuendo, has close affinities with fundamental aspects of Takemitsu’s temporality.

### Temporality

Takemitsu (1995: 86) considers time as totality in which “the ‘unknown’ is neither past nor future ... it exists only in the precise present”. Some scholars noticed the overall static effect of Takemitsu’s music (cf. for example Galiano: 39). Static time is conditioned by the above-discussed rather homogeneous harmonic background. However, at the same time, it is characteristic of Takemitsu to have constant dynamic, harmonic or textural intensifications that result in local forwards going into foreground melodies or sequences of chords; these usually vanish into the harmonic background or are immediately succeeded by other melodies or chord sequences. Such temporal processes can be found in earlier pieces as well as in pieces after 1980 with characteristic fluctuations between local teleological, chromatically more intensive periods performed mostly by solo instruments or small groups, and that then release into diatonic, more integrated harmonic structures that are played tutti. Temporal continuity and the sense that the foreground gestures belong to the background are conditioned by the above discussed unifying harmonic structures. Fluctuation between local teleological semes and their neutralization can be seen, to mention just a few examples, in:

- *To the Edge of Dream* (see, for example, sudden crescendo in Bar 3 and pianissimo played by the muted brass in Bar 4);
- *A String Around Autumn*, in which a most intensive forte is immediately neutralized by the disappearance to *al niente* (Ex. 10) or processes between sections J and M;
- *How Slow the Wind* (see especially Sec. F);
- *Vers, L’Arc-en-Ciel, Palma*;
- Many places of *Spirit Garden*, *Dreamtime* or *Dream/Window*.

The same juxtapositions and simultaneities of intensive foreground focuses and more static background harmonic fields can be also found in earlier pieces such as *November Steps*, *Gemeaux* or *Le Son Calligraphié III*. In earlier and later pieces Takemitsu distributes over time aspects of the same complementary harmonic structures. Since various semes are derived from the same harmonic continuum, similarly to syntagms of Debussy, morphologically they are neither identical nor different from each other – they are different actualizations of the same predominant harmony and modality. Thus, we can hardly apply Takemitsu’s temporality traditional models of linear narrativity, since as he puts it himself: “[A] single element is never emphasized with development through contrast”. Similarly to the mosaic-like temporality of Debussy, “music is composed as if fragments were thrown together somewhat unstructured, as in dreams” (Takemitsu 1995: 106).

To describe Takemitsu’s temporality, the metaphor of a garden, in which elements and surroundings are always mutually interconnected, could be invoked again. A garden is a spatial-temporal totality (field), i.e. temporal horizon that accumulates in it various focuses. Constantly appearing and disappearing focuses create an impression that there is “a larger background of indeterminate space” (Koozin 1993: 187). Because of the temporal interchangeability of these focuses, musical time can be compared with wandering in the garden, without any teleological intention, as Takemitsu (1995: 88) puts it: “[A] composition should not give the impression it is complete in itself. Which is more pleasurable, a precisely planned tour or a spontaneous trip?”

The image displays a comprehensive musical score for a section of a string quartet and orchestra. The score is organized into systems for various instruments, including woodwinds, brass, strings, and percussion. Key features include:

- Tempo and Rhythm:** The score starts with a tempo marking of *poco rit.* and *Tempo 1º*. It features several time signature changes: 4/4, 3/4, 4/4, 5/4, and 4/4.
- Dynamic Markings:** A wide range of dynamics is used, from *pp* (pianissimo) to *ff* (fortissimo), with many passages marked *al niente* (fading to silence).
- Performance Instructions:** Specific directions include *1º-3º C.S. (straight mute)* for trumpets, *1º-2º S.S.* for trombones, and *1º Solo scabietic* for the cello.
- Instrumentation:** The score includes parts for Flute (Fl.), Oboe (Ob.), Oboe d'amore (Ob. d'amore), English Horn (E.h.), Clarinet (Cl.), Bassoon (Cb. Cl.), Bassoon (Bsn.), Double Bassoon (D.bsn.), Horn (Hr.), Trumpet (Trp.), Trombone (Trb.), Horn I (Hp. I), Horn II (Hp. II), Piano (Pf.), Percussion (Perc.), Solo Viola (Solo Via.), Violin I (1st Vin.), Violin II (2nd Vin.), Viola (Via.), Violoncello (Vc.), and Double Bass (Db.).
- Complexity:** The score is highly detailed, with many notes, rests, and articulation marks, reflecting the intricate nature of the piece.

Example 10. A String Around Autumn for viola and orchestra, Section S  
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## Touch and Dynamics

One of the most immediately recognizable aspects of Takemitsu's music is its dynamics and articulations. As Burt (2001: 29) notices, from the first pieces such as *Uninterrupted Rests* and *Lento*, Takemitsu's musical gestures are characterized by an emergence from silence and a retreat to it. In this process, quite intensive crescendos are usually immediately neutralized by gradual or subito pianissimo. Such a dynamic gesture is constantly used in later pieces as well (Ex. 11); it reflects the above-discussed temporal processes.

Intensive dissonant textural strata in pieces like *Textures* (from cycle *Arc II*), *November Steps* or *Green* are usually distributed in a high register, and are dynamically silent. Double basses in a higher register usually play flageolets, whereas in low registers the dynamics is also very low. Brass instruments most often play with sourdines; the penetrating timbre of brass is often covered by strings. Metal percussion instruments, such as tam-tams or gongs, are frequently used; however they play in limits of *ppp-mf* and create kind of background drone for forth-ground motives (see Ex. 2 above; the beginning and end of *To the Edge of Dream*; section M of *A String Around Autumn*).

Example 11. *Dreamtime* for orchestra, Section L, strings solo  
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For Takemitsu, the forte is not characteristically extended; the flash-like culminations are usually immediately extinguished (see Ex. 10 above; also *Dream/Window* sections N and Q, *How Slow the Wind*, Section N, or *To the Edge of Dream*, Section Q). Such preferences could be compared with ambiguous “piano sonore” or “forte con sourdine” of Debussy and Fauré (cf. Jankelevitch 244). Takemitsu himself expressed them by instructing musicians to play his *Chamber Concerto* “quietly and with brutal attack” (in Burt 2001: 59) or invoking the example of the Japanese puppet theater bunraku vocal, which “holds the strongest expression of violent emotions, although it is at the same time highly restrained in its use of the voice” (Takemitsu 1995: 11).

## Melodic Structures

Poly-focused, complimentary harmonic structures are reflected in Takemitsu's melodies. Harmonic bipolarity, noticed already in early twelve-note technique based compositions, such as *Le Son Calligraphié III* (cf. Burt 2001: 71), *Uninterrupted Rests* or *Hika* (cf. Burt 2002: 160–163) is predominant in the majority of his later pieces too. Melodic motives most often are constructed by juxtaposing segments of two whole tone scales. The segments of different whole tone scales are often separated by registers, and in this way fragmentation and bipolarity is more emphasized. Similarly to Debussy's intentions to create something “more divided, detached and impalpable” (Debussy in Jarocinsky 104), Takemitsu in his later years expressed the necessity of a “melody of many threads intricately twisted together” (in Narazaki: 77). How the harmonic bipolarity and melodic “threads” are realized, we can see in the melodic examples 12–17 below.

Fragmentation is also characteristic of late Takemitsu's motto-motives, i.e. certain melodic or harmonic structures that function as a recognizable semes. Similarly, to Debussy's narratives, motto-motives appear and reappear several times during the piece. In later pieces, such as *Vers*, *L'Arc-en-Ciel*, *Palma*, *Spirit Garden* or *Dream/Window*, motto-motives are constructed using all the twelve pitches of a chromatic scale. However, similarly to twelve-note serialism-based pieces of the 1960s, the pitch collection is divided into three or four distinguishable fragments that are often distributed as a sequence of chords in which the above discussed whole tone scale flavor and harmonic poly-focus can be found (see Ex. 3–6 above).



Example 12. *Far Calls. Coming, Far!* for violin and orchestra, bars 10–13 (This melody is constantly used in various other parts too.)  
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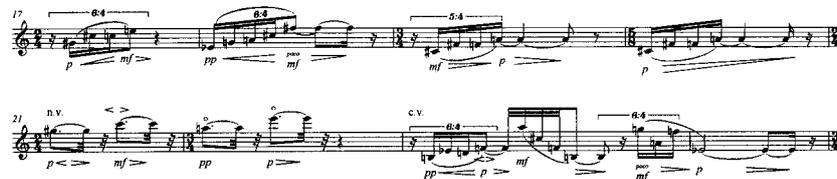
Example 13. *Vers, L'arc-en-ciel, Palma* for guitar, oboe d'amore and orchestra. Oboe d'amore's solo part, section I, bars 4–8.  
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Example 14. *Entre-temps* for oboe and string quartet. Oboe's part, bars 70–72.  
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Example 15. *To the Edge of Dream* for guitar and orchestra. Guitar's solo part, sections C–D.  
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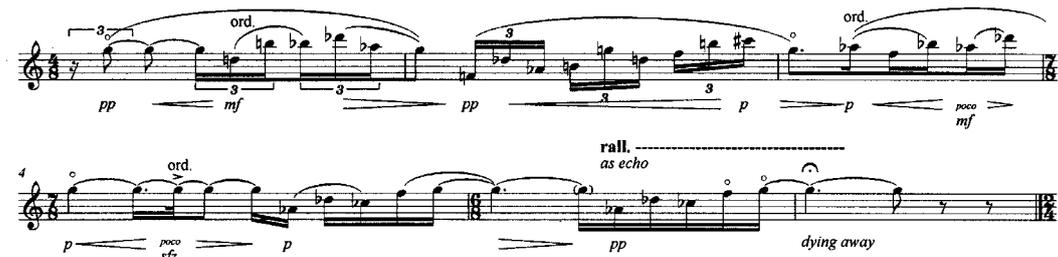


Example 16. *Air* for flute solo, bars 44–51.  
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Example 17. *And Then I Knew 'Twas Wind* for flute, viola and harp. Flute's part, section N.  
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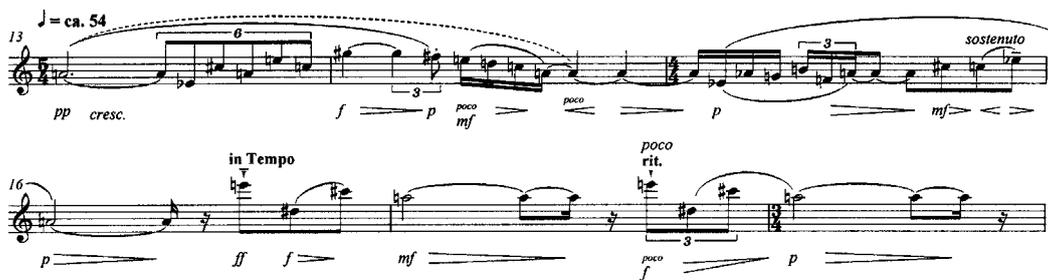
Takemitsu's melodic structures are also characterized by centripetal tendencies, when one tone of the poly-focused melody is constantly emphasized by being longer sustained (see Ex. 18–20 below). In many later pieces, such as *How Slow the Wind*, *Air*, *And Then I Knew 'Twas Wind*, *Entre-Temps* or *Spirit Garden*, motto-motives, fragmented-bipolar melodies, and centripetal melodies are interchanged: recognizable motto-motives and centripetal melodies are constantly juxtaposed with bipolar melodies. However, since all these melodies-semes are derived from the same harmonic field, morphologically they can be defined as neither identical nor different from each other. Such a relationship between semes is close to that of Debussy. However, as distinct from Debussy's longer euphoric states conditioned by diatonic harmony, Takemitsu's more fragmented and tense harmonic structures results in constant ambiguity as a predominant modality.



Example 18. *Entre-temps* for oboe and string quartet. Bars 127–132 (last bars), oboe’s part  
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Example 19. *Dream/Window* for orchestra. Section M, flute’s part  
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Example 20. *Air* for flute solo. Bars 1–6  
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### Narrativity

Since there are no longer teleological processes, as Narazaki (p. 81) notices: “gestures themselves being irreducible “minimal” analytical units, applies to both Takemitsu’s melodic style and textural formations”. What message does Takemitsu send by these “gestures”?

As can be seen from what was discussed above, it is characteristic of Takemitsu that there is a temporal continuity in which heterogeneous aspects (focuses) of the same ambiguous harmonic structure (field) are manifested. The underlying harmonic bipolarity makes forwards-going, dynamically intensified melodic lines fragment or split. Thus, speaking in terms of modalities – the disengagement (intensification, “will”) is immediately “split” (neutralized, negated). Such an ambiguous process is also reflected in dynamics and instrumentation – immediate intensifications and neutralizations, constant appearances and disappearances of “gestures” into a drone-like background.

Following Greimas-Tarasti terminology and models, in Takemitsu’s “gestures” or semes we find ambiguous simultaneity and immediate interchange of contrary modal utterances: dysphoric subject-focus (S˘O) of “doing” is immediately neutralized by belongingness to the field (S˘O). This results in a chain of different, often superimposed semes (Var 1; Var 2; Var 3 etc.), which however signify the same fundamental ambiguity (S˘O + S˘O). Homogenous harmonic structures condition an ecstatic temporal horizon and the predominant background modal utterance of “being” (Em - être modalité). Thus, the narrativity predominant in the majority of Takemitsu’s pieces could be schematized as follows (these two lines should be red simultaneously):

S˘O (focus) → S˘O (field) Var 1; S˘O → S˘O Var 2; S˘O → S˘O Var 3; S˘O → S˘O Var 4 etc.  
Em (as underlying S˘O + S˘O – ambivalent being) -----

In the very end of *How Slow the Wind*, the essence of Takemitsu’s narrativity is revealed very clearly: the final pianissimo release into Des-dur traditionally suggests that the piece would end in euphoria; however, this euphoria is “split” by a harmonically contrastive intensively falling and reverberating motive (Ex. 21). The intention to signify such differentiated unity can be found in Takemitsu’s aesthetic considerations:

I use “dream” and “window” as metaphors for the two contradictory dynamisms of facing inward and outward. To make the inner and outer resound simultaneously is the prime object of the music” (Takemitsu, about *Dream/Window*, in CD booklet of *Orchestral Works II*, World Premiere Recordings. CO-78944) “[m]ost important thing in Japanese music is space, not sound. Strong tensions. Space: ma. I think ma is time-space with tensions. ... It is vital. ... Not “rest” (Takemitsu 2002: 229).

The narrativity of Takemitsu could be also compared with shakuhachi’s honkyoku pieces, in which the “master shakuhachi player, striving in performance to recreate the sound of wind in a decaying bamboo grove, reveals the Japanese sound ideal: sound, in its ultimate expressiveness, being constantly refined, approaches the nothingness of that wind in the bamboo grove” (Takemitsu 1995: 51). Thus, according to Marrett (p. 240), we can listen to Takemitsu’s music “in the way that one listens to honkyoku and it works very well”.

Example 21. Final bars of *How Slow the Wind* for orchestra  
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### Aesthetic Categories

Now we should come back to our initial question of how Takemitsu's modalities and narrativity are related to the aesthetic values of Japan. Japanese aesthetic sensibilities are manifested in several aesthetic categories which are necessary to discuss in a nutshell. Most essential of them are aware, *yūgen*, *sabi* and *wabi*. These categories emerged in different ages and were used in different form of arts. Nevertheless, there are many structural affinities between them conditioned by East Asian worldviews.

In old treatises these categories were mostly used for defining poetic states (Suzuki & Iwai 2006: 31), or metaphorical descriptions of aesthetic qualities in certain arts. In works of scholars of the late 19th and 20th centuries and their attempts to create a "conceptual system" (Suzuki & Iwai 2006: 144) of Japanese art they started to be used as key definitions characterizing Japanese aesthetic consciousness (emphasizing its difference from the West), and manifestations of them were found in various arts. Thus, to some degree, Japanese aesthetic categories could be considered as a modern construct with purpose of articulating national identity in aesthetics (cf. Marra). Aesthetic categories are seldom mentioned in Takemitsu's aesthetic considerations; however, the values they express evidently are reflected in his musical messages.

Mono no aware was presented by the first major literature theorist and nationalist of Japan, Motoori Norinaga (1730–1801), as the oldest, and a genuine Japanese aesthetic concept. The term aware already appeared in *Kojiki* (714) and *Tosa Nikki* (935) (cf. Meli 2002a: 60); however the aesthetics of aware is usually related to *The Tale of Genji* by Murasaki Shikibu (973–1014), where aware was mentioned 1018 times (cf. Morris 207). It is often translated as "the pathos of things" and defined as a deep emotional response or ability to react with empathy to the beauty of things (jap. mono). In Norinaga's explanations:

The word "aware" is a combination of "aa" and "hare"... "Today we would use the exclamation "Ah" (aa) and "Oh" (hare). Looking at the moon or at cherry blossoms, for example, we are deeply impressed and say: "Ah, these splendid flowers!" or "Oh, what a beautiful moon!" (*The Jeweled Comb of the Tale of Genji* in Marra: 127).

However, the noun aware derives from the verb awaremu (哀れむ), that is usually translated as "to have pity on an object; or feel compassion for an object", thus at the same time aware is defined by Norinaga as "the voice of sorrow that comes out from what the heart feels after seeing, hearing, or touching something" (ibid.).

According to Yoshinori, aware is not a direct response but rather taking a contemplative distance from the object or "a kind of indirect feeling or exclamation at the time of quiet resignation" (in Marra 125). It is characteristic of a lot of places in the *The Tale of Genji* where "the essence of nature and human life tends to be grasped in terms of their end, in their dying moments rather than in their birth or creation" (Shirane 123). In this way, aware reflects the situation "in which the individual seems to have lost the will, power, or desire to control his or her destiny" (ibid.). In this sense, aware is not so far from the values of Buddhism; according to Heine (p. 80), aware is closely related to the philosophy of Dōgen, which maintains that life and death are equally the manifestation of the total dynamism or "impermanence-Buddha-nature" (mūjo busshō 無常仏性). Speaking in terms of Greimassian definitions, aware could be defined as a conjunction with the thing (mono) (S˘O), in which the moment of disjunction (pity) (S˘O) is already included; in the temporality of aware, the intensive being (praise, love) already includes in itself a moment of perishability (pity, sorrow). Such a constellation of modalities can be considered as ambiguous simultaneity of conjunction and disjunction (S˘O + S˘O); and in this sense it relates to predominant modality Takemitsu's music – ambivalent being.

The concept of *yūgen* that emerged in Medieval Japanese aesthetics following the meanings of its composites *yū* (幽) – dim and *gen* (玄) – dark is usually translated as "bottomless, mysterious, dark beauty" (translations into English in the 20th century are summarized in Suzuki & Iwai 2006: 488–89). It has close affinities with postulates of Taoist and Buddhist cosmology (Suzuki & Iwai 2006: 300–301) where phenomena are considered as an endless process of changes from actual to potential, from being to nothing. Thus an aspect of mystery of *yūgen* lies in the ambiguous simultaneity of actual and potential, clear and hidden.

This Ambiguity can be seen in Kamo no Chōmei's (1153–1216) and Shōtetsu's (15th c.) descriptions of *yūgen*:

The qualities deemed essential to the style are overtones that do not appear in the words alone, and an atmosphere that is not visible in the configuration [sugata] of the poem ... On an autumn evening, for example, there is no color in the sky nor any sound, yet although we cannot give any definite reason for it, we are somehow moved to tears ... Or again, it is like the situation of a beautiful woman who, although she has cause for resentment, does not give vent to her feelings in words, but is only faintly discerned – at night, perhaps – to be in a profoundly distressed condition ... It is only when many meanings are compressed into a single word, when the depths of feeling are exhausted yet not expressed, when an unseen world hovers in the atmosphere of the poem ... (Nihon Kagaku Taiken 3: 312–13 in Miner, Odagiri & Morrell (eds.) *The Princeton Companion to Classical Japanese Literature*, p. 269).

*Yūgen* can be apprehended by the mind, but it cannot be expressed in words. Its quality may be suggested by the sight of a thin cloud veiling the moon or by autumn mist swathing the scarlet leaves on a mountainside. If one is

asked where in these sights lies the *yūgen*, one cannot say, and it is not surprising that a man who fails to understand this truth is likely to prefer the sight of a perfectly clear, cloudless sky. It is quite impossible to explain wherein lies the interest or the remarkable nature of *yūgen* (In Tsunoda, Barry & Keene, *Sources of Japanese Tradition*, p. 115).

The quality of *yūgen* as the utmost expression was considered as a feature of supreme artistic mastery. In old treatises of Zeami, Mitsuoki, Yūshō, and Jigu (cf. Ueda 1991) artistic mastery is defined hierarchically and described phenomenologically. As in the earlier Chinese tradition, definitions of artistic and existential mastery, in many cases, coincide. Jigū (defining the highest mastery of narrative singing with biwa accompaniment (*heikyoku*) emphasizes that what is most important for the performer is to “realize the Heike story”, i.e. to know what is prospering and decay, being and death. Only such an existential experience can result in the ambivalently described singing that “is empty and transparent, yet colorful, graceful, and shapely” (cf. Jigū, *The Remnants from the Western Sea (Saikai Yoteki Shū)*, from the early 17th century, quoted in Ueda 1991: 117). Such aesthetic preference is very close to above quoted Takemitsu’s instruction of playing “quietly and with brutal attack”; brutality is usually associated with the accumulation of energy; yet, it is not expressed and it makes this state ambivalent.

The concept of *sabi* has two etymological explanations and both of them are used in aesthetical considerations. The noun *sabi* (寂び) can be directly translated as “patina” or “rust” (Suzuki & Iwai 2006: 33, 488). In the context of poetry, the tea ceremony, or the atmosphere of the garden, *sabi* is defined as “the appreciation of the old and weathered or mossy surfaces” (Eliovson, Sima in Suzuki & Iwai 2006: 488) or “the appearance of antiquity, age, hoariness, rusticity, natural textures” (Engel, David H. in Suzuki & Iwai 2006: 488). *Sabi* as “patina” or “rust” has etymologic connections with *sabireru* (寂れる *falter, go downhill*), *sabireta* (寂れた *forlorn*) and the *sabishii* (寂しい *lonely, alone*) – all written using the same character.

In this sense, *sabi* also becomes close to *wabi*, which is derived from the adverb *wabishii* (侘しい *desolate, dreary, and forlorn*). *Wabi*, that is usually translated as “austere beauty”, became an aesthetic appreciation of “rustic simplicity and solitude” (Kuck, Eliovson in Suzuki & Iwai 2006: 489), “impoverished charm”, or “honest ordinariness” (Albright, Tindale in Suzuki & Iwai 2006: 489). The concepts of *wabi* and *sabi* in the sense of “patina” or “austere beauty” were manifested in traditional garden designing or architecture. After Meiji, they were usually used together as *wabi-sabi* (cf. Suzuki & Iwai 454), especially in considerations about architecture and design. Although in current investigations (cf. Suzuki & Iwai 410–12), there is a tendency to separate them, and spirit of Zen is mostly illustrated by *wabi*. However, both *wabi* and *sabi* as aesthetic values stem from the poetics of *waka* in which *sabishii* and *wabishii* were used as words indicating states of solitude, desolation, and realizing the impermanence of being (cf. Suzuki & Iwai 2006: 32–33). In this way, the *wabi-sabi* garden’s design of “rustic simplicity and solitude” was related to loneliness and impermanence as fundamental existential modes.

The interrelatedness of micro and macro planes can be found in the structures of traditional haiku. The narrative principle of Bashō’s poetics principle is described as *shiori*, which similarly to *sabi* has a double meaning: “[a] verb *shioru*, which means “to bend” or “to be flexible” (撓る) . . .” But there is another verb, *shioru*, written differently (萎る) which means “to wither”, “to droop” or “to wilt” (Ueda 1991: 154). Thus, *shiori* in the sense of “bend” is interrelated to the subjective (micro) and cosmological (macro) realms; whereas in the sense of “wither” it interrelates the temporal horizons of present and future, i.e. enables the possibility of seeing phenomena as immersed in the process of change, impermanence. In this way, the dysphorous moment of “wither” makes Bashō’s poetics close to the perishability or sorrow of aware.

Invoking the terms of Heidegger, sensibilities of *wabi* and *sabi* imply the shining of “ground” to which the human “world” belongs (cf. *The Origin of Work of Art*). Again, in Takemitsu’s music, especially in the above discussed belongingness of melody-focus to the field, disappearances of volitional themes (subject) into indifferent background, we can find structural affinities with these aesthetical categories. The principle of preserving the totality is at work there (cf. Motiekaitis p. 37–64). Fundamental ontological realms such as being and nothingness, and temporal horizons such as life and death are considered as a differentiated unity. Accordingly, the modal utterances of conjunction (S˘O) and disjunction (S˘O), instead of dialectical narrative sequences (S˘O → S˘O), are rather simultaneously saturated (S˘O + S˘O). Namely such configuration of modalities, being distinct from romantic “rhetoric of conflict” (Bachtin) characterizes, to my mind, Japaneseness of Takemitsu’s music.

My final question is whether such aesthetic values are uniquely Japanese or rather universal. Besides the above mentioned affinities with Debussy’s poetic subject, where there are many ambivalent sayings, like “[T]he human being is only a reed, the most feeble in nature; but this is a thinking reed” (Pascal, *Pensées* Section 6) in one period of Western cultural history when the values of anthropocentrism declined, infinity of cosmos and uncertainty of human’s place in it was painfully realized.

Was this ambivalence reflected in some musical aspects of baroque? Is it not visible in insertions of some dissonances into sequences of consonant chords and minor tonalities into predominant major ones (cf. for ex. Bach's C-major prelude of Well-Tempered Clavier); or in a very ambivalent musical message of melody in major which is placed into a descending harmonic pattern (catabasis) (cf. for ex. Bach's Largo of C-major violin Sonata BWV 1005). Does this not speak about our existential ambivalence, of presence that "simultaneously conceals [verbirgt] itself" and "is already absence" (Heidegger 2002: 202)? Is not it the most fundamental message music can send us?

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## Tōru Takemitsu muzika ir Japonijos estetišės vertybės

### Santrauka

Tōru Takemitsu muzikoje nemažai klausytojų ir muzikologų išvelgia Japonijos estetišės vertybių manifestacijas, tačiau iki šiol trūksta kontekstualaus ir sistemiškesnio jų tyrimo. Šiame straipsnyje mėginama susieti Takemitsu muzikos aspektus ir filosofinį bei estetišės kontekstą. Pasitelkiant A. J. Greimo modeliais grįstus Eero Tarasti metodologinius aspektus mėginama apibrėžti, kokios modalumo ir naratyvo formos būdingos Takemitsu muzikai ir kaip tai susiję su tradicinėmis Japonijos estetišės vertybėmis. Takemitsu muzikos erdvinei architektonikai, harmonijos ir laiko organizacijai bei poetiniam subjektui būdinga ambivalentiška konfigūracija: euforija ir disforija čia funkcionuoja ne kaip dialektinės opozicijos, bet greičiau kaip diferencijuota vienovė. Analogiška semiotinė konfigūracija būdinga ir tradicinei japonų poetikai, paprastai apibrėžiamai pasitelkiant *aware*, *yūgen*, *sabi* ir *wabi* estetišės kategorijas. Tiek muzikos, tiek kitų menų poetiką vienija gilesnio lygmens sintagminės struktūros, užtikrinančios kultūros homogeniškumą ir aptinkamos atliekant semiotines redukcijas.

## The Notion of *Seyir* as a Conceptual and Typological Scheme for *Comprovisation*

### Annotation

With this paper, drawing from Iannis Xenakis' theoretical observations on musical architectures (*outside-time*, *temporal*, *in-time*), and Sandeep Bhagwati's conceptual framework of *notational perspective* and *comprovisation*, a term which attempts to encompass practices that blend improvisation and composition, I aim to present the context and the outcomes of my practice-based research. During the past few years, I have been exploring ways that the *temporal* structure and the *in-time* modality of my violin improvisation performance-praxis could be transduced into the symbolic level, in order to generate a notational strategy for a *comprovisation* practice involving other performers. Throughout this process, I have been examining the *outside-time* architecture of a modal music tradition. This paper presents the notion of *seyir*, used in Middle Eastern *makam* music to describe the prescriptive path of melodic phases within a *makam* scale, denoting the "character" of a *makam* modal entity, and the ways it has informed the developed notational approach both conceptually and typologically. Drawing from the concept of *seyir* and *makam* modal music, the musical term *melody* is understood here as modulation and *trópos* (τρόπος – "way, mode, manner") of transition between sound-configurations, in an attempt to re-introduce the *modal* into our current music-making practices.

**Keywords:** *comprovisation*, improvisation, composition, *seyir*, *trópos*, modality, *outside-time*, *temporal*, *in-time*, music notation, tablature notation, gestalt, sounding-gestalt, sound-configuration, melody, Iannis Xenakis, Middle Eastern *makam* music.

*Marco Polo describes a bridge, stone by stone.  
"But which is the stone that supports the bridge?" Kublai Kan asks.  
"The bridge is not supported by one stone or another," Marco answers,  
"but by the line of the arch that they form."  
Kublai Kan remains silent, reflecting. Then he adds:  
"Why do you speak to me of the stones? It is only the arch that matters to me."  
Polo answers: "Without stones there is no arch."  
Italo Calvino (1972), *Invisible cities**

### 1. Melody and Musical Architectures

Iannis Xenakis, in his book *Formalized Music*, proposes a distinction between *outside-time*, *temporal*, and *in-time* musical architectures or categories (Xenakis, 1992: 183). The *outside-time* denotes the geometry of a musical system; a space where structures and sound organisms are being born "distinguished from their temporal manifestation". The *temporal* is the ordering and the actual occurrence of events, or else, the "blank blackboard" of metrical time where "symbols and relationships" can be inscribed (ibid.: 192). For Xenakis, a compositional element, a melody or a chord, is created when an *outside-time* structure is related to a *temporal* category (ibid.: 183). The realization of these elements denotes the *in-time*, "a play that makes [the *outside-time* and the *temporal*] pass into the instantaneous, the present, which being evanescent does not exist" (Xenakis, 1969: 51, cited in Exarchos, 2012: 4).

If, in a kind of linguistic genealogy, we were to contemplate the musical term *melody*, we could perhaps observe that Xenakis' theoretical conceptions are already encapsulated in the word's origins. The word *melody* is derived from the Greek, *melodía* (μελωδία); a compound consisting of the words *mélōs* (μέλος), which means, "part of a group or body, member or limb", and *odé* (ωδή), which means, "song, tale, story". The noun *mélōs* (μέλος) is also related to the verb *mélō* (μέλω, μέλομαι) which means "to take an interest in, to be an object of care or thought", according to Liddell and Scott lexicon. On that account, the origin of the word *melody* implies that a thoughtful process is at work; one where certain relationships between a whole and its parts are composed *outside-time*, into a form that carries the potential of becoming *in-time*: a rhapsody to be sung, a tale to be told, a melody to be performed. In a like manner, by turning the word into an adjective and changing the term into a phrase – melodic line, melodic process, or, melodic development – its *temporal* dimension as flow, movement, or direction towards points or attractors is emphasized.

It seems then that the theoretical conception of melody needs to be examined as a dynamic system that relates to two main aspects:

1. The geometry of materials and processes that compose an *outside-time* architecture from which a melodic line might emerge;
2. The agents that bring into life a melodic gestalt by realizing its functions in an *in-time* irreversible temporal flow.

The enquiring into the phenomenon of melody through the lens of these two aspects becomes even more important when a compositional practice introduces improvisation as a compositional element, for which I would like to use the term *comprovisation*.<sup>1</sup> Such compositional approaches not only give a significant amount of expressive freedom to the performers, but also suggest a re-configuration of the notion of melody within the framework of the musical content they introduce.

Following on from the above, in the next sections, I will discuss the two aforementioned points regarding the phenomenon of melody, in the context of my practice-based research. In particular, I will present the ways I have been exploring the notion of *seyir*, used in Middle Eastern *makam* music to describe the melodic development of a *makam* modal entity, as a conceptual and typological scheme for the notation of my *comprovisations*.

## 2. Improvisation and Composition

According to Richard Barrett's view, improvisation is "a method of composition, one which is characterized by spontaneous musical actions and reactions" (Barrett, 2014: 61–62). Similarly to Barrett's proposal, I have tried to suggest elsewhere that if we were to re-think creativity as a "bringing-forth" (*poiesis*; Heidegger, 1977: 11, 13), and composition as a process of investigating the synthesis between the different realities inside oneself, then improvisation can be seen as the *technē* (τέχνη, *tékhnē*) of making a spontaneous composition (Papageorgiou, 2015: 45). In this sense, an artwork, either improvisation or composition, can be understood as a figure; a gestalt that emerges from the *noise*, or else the *meshwork* that constitutes our experiential patterns, and *enframes* our distinct creative practices in a dynamic and temporal manner towards this poetical bringing-forth (see Heidegger, 1977&1993; Serres, 1997; Ingold, 2007). Accordingly, the irreducible processes through which our unique experiential structures impart their qualities into the unforeseeable operations of musical decision-making,<sup>2</sup> render all participants (performers, improvisers, composers) not only equal, but also as the collective medium of the emergent figure.

The framework of thoughts presented above is the lens through which I have been exploring the materiality of my practice (and vice versa), both as an improviser and as a composer, and in a kind of a feedback loop between the two. Regarding the former, and in a self-effacing manner, it is interesting for me to see the ways in which my violin improvisations have been transformed throughout the years into a "non-idiomatic"<sup>3</sup> form, following Derek Bailey's terminology. This transformation was the result of an explorative process that involved a "questioning of musical language" (Bailey, 1992: 84); a wrangling with the sound-historicity of the instrument, and an interaction with different communities of creative practitioners that influenced and reflected back into this process. For the sake of argument, I could perhaps describe the *in-time* manifestation of my current improvisation practice as a performance-generated "melodic" line on the violin, involving an open-ended materiality, ranging from pitched sounds to unconventional playing and extreme extended techniques, mainly guided by the gestures and actions required to arrive at a particular sound.<sup>4</sup>

During the past few years, I have been researching methods that would allow me to bridge the two practices. Borrowing Xenakis' words, I have been trying to discover the *outside-time* architecture enclosed in the open-ended character of my improvised sounding-gestures, to transduce these into the symbolic level, and communicate their *in-time trópos* (τρόπος – "mode, way, manner") to other performers. At the same time, I was interested in developing a notational device that would allow me to present, in the score, the "internal relations between sound-configurations" (Tenney, 1973: 1–2) of a composition, while giving performers a setting for structured improvisation.

It seemed to me that in order to introduce the notion of "modality" into my compositional and notational practice, I had to examine the *outside-time* architecture of a modal system. Turkish and Middle Eastern *makam* music appeared like the ideal field for investigation, mainly because of reasons of familiarity and closeness. To be more specific, in the past, I had the chance as a performer to engage practically with Greek folk music; a tradition that demonstrates some similar characteristics with the *makam* phenomenon, considering the

<sup>1</sup> The term *comprovisation* is discussed further in section 4 of this paper.

<sup>2</sup> Here I am referring to musical decision-making that occurs in both practices; either throughout the process of composing, rehearsing, and performing a musical piece, or, in a solo/collaborative improvisation setting.

<sup>3</sup> Derek Bailey introduces the terms "idiomatic" and "non-idiomatic" in order to describe two main forms of improvisation. With the term "idiomatic" he aims to recognise any form of extemporization that is "concerned with the expression of an idiom [while] tak[ing] its identity and motivation from that idiom". With the term "non-idiomatic" he aims to denote a method of musical creation which is "most usually found in so-called free improvisation, and while it can be highly stylized, it is not usually tied to representing an idiomatic identity" (Bailey, 1992: xi–xii).

<sup>4</sup> Some sound examples that perhaps can illustrate this description, can be found in the following link: <http://www.dimitrispapageorgiou.com/improvisation>

common history of this geographic region. In addition, *makam* music not only encapsulates the *outside-time* modal structures of the past, both in its composed and improvised forms, but its theory is documented, and its praxis is still alive today.

### 3. *Makam and Seyir*

The term *makam* has been used since the 15th–16th centuries by different regions of the core Islamic world to describe their art music. Although the *in-time* manifestation of *makam* music as a melodic line, either composed or improvised, remains quite the same throughout this geographical area, there are differences regarding both the actual praxis and the theoretical conception of the system between the regions within it. That being said, this paper will focus only on what is known as the Ottoman *makam* composition/improvisation tradition, which developed in the late-19th and early-20th centuries into the modern Turco-Arabian *makam* theoretical system. In particular, I will present some basic theoretical concepts following Walter Feldman's ethno-musicological studies that document Dimitrie Cantemir's (1673–1723) early-17th century writings on the music composed and performed inside the Ottoman court. These will be followed by an introduction to the current theory of intervals and the basic modal nuclei. The presentation will close by discussing the notion of *seyir*.

The first step that Cantemir made towards theorizing Ottoman *makam* practice was to introduce its general scale in the form of textual instructions accompanied by a visual representation of the placement of the note-names on the neck of the fretted instrument *tambûr*. The gamut of the system consisted of sixteen basic scale degrees (*tamâm perdeler*, or, whole frets), and seventeen secondary scale degrees (*nâ-tamâm perdeler*, literally “incomplete”, or, half frets; Feldman, 1996: 195, 201–203). (Fig. 1)

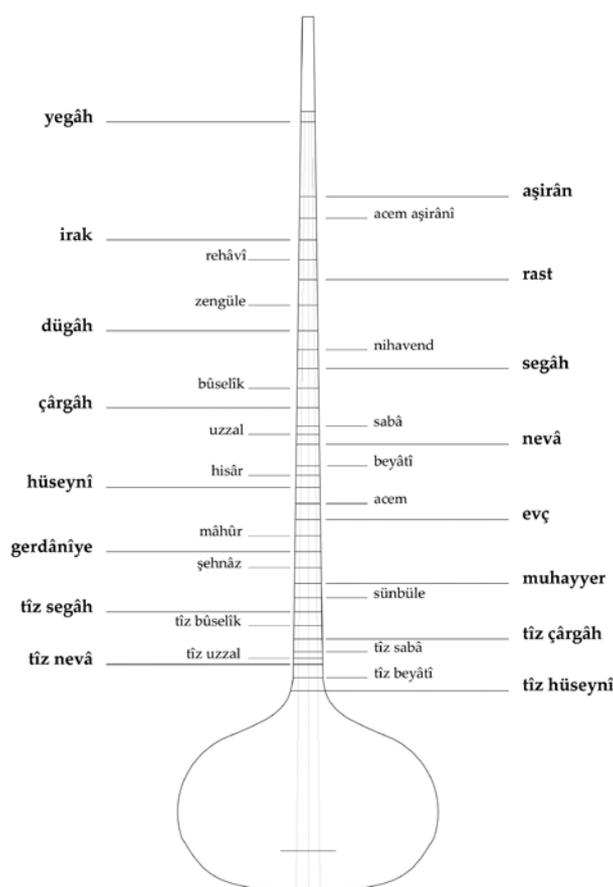


Figure 1. Illustration made by the author, as depicted in Ozan Yarman's (1996) *79-Tone Tuning and Theory for Turkish Maqam Music* (p. 69).

The gamut of the system presented in Dimitrie Cantemir's early-17th century writings, showing the placement of the general scale on the neck of the fretted instrument *tambûr*, including the Turkish names of the notes and their relevant intervallic distances; written in bold are the sixteen basic scale degrees (*tamâm perdeler*, or whole frets)

The word *makam* means “place, spot, state” and as a term it was coupled with a note-name to define a mode by its position (*makam*) upon the general scale (ibid.: 196, 198–199). Cantemir grouped modal entities into three main categories: i) “independent” (*müfred makams*); ii) “compound” (*mürrekeb makams*, and; iii) “compound/combinations” (*terkibs*). Although it falls beyond the scope of this paper to present the differences between these categories, it is important to note that *müfred makams* are understood as modes that develop around a central axis, while *terkibs* are compound forms of two or more modes that are subordinate to the one whose central axis becomes the *finalis* (*karar*) of the melody (ibid.: 223, 230–233).

In the beginning of the 20th century, Suphi Zühdü Ezgi (1869–1962) and Hüseyin Sadeddin Arel (1869–1955) among others, codified Cantemir’s general scale, the intervallic relations, and the basic modal nuclei of the system, in Western music notation. The current theory of intervals involves such discrete units as 1, 4, 5, 8, and 9 commas. The basic modal nuclei are six main tetrachords and pentachords (*genres*) of twenty-two and thirty-one commas respectively. *Makam* scales are created either by conjunct juxtaposition, or by conjunct juxtaposition and iteration of the *genres* resulting in octave-scales of fifty-three commas<sup>5</sup> (Aydemir, 2012: 23; Feldman, 1996: 205, 222). (Fig. 2)

The *seyir* of a mode, or else, its melodic movement within a *makam* scale, is that which gives a modal entity its “character”.<sup>6</sup> As Feldman writes, the word *seyir* originates from the Arab verb *sâra*, which means “to move, to set out, to travel” (Feldman, 1996: 257), and as a musical term it can be understood to be a prescriptive path of melodic phases, an *outside-time* structure of melodic stages, following Xenakis, which transforms a sequence of notes into a *makam* mode.

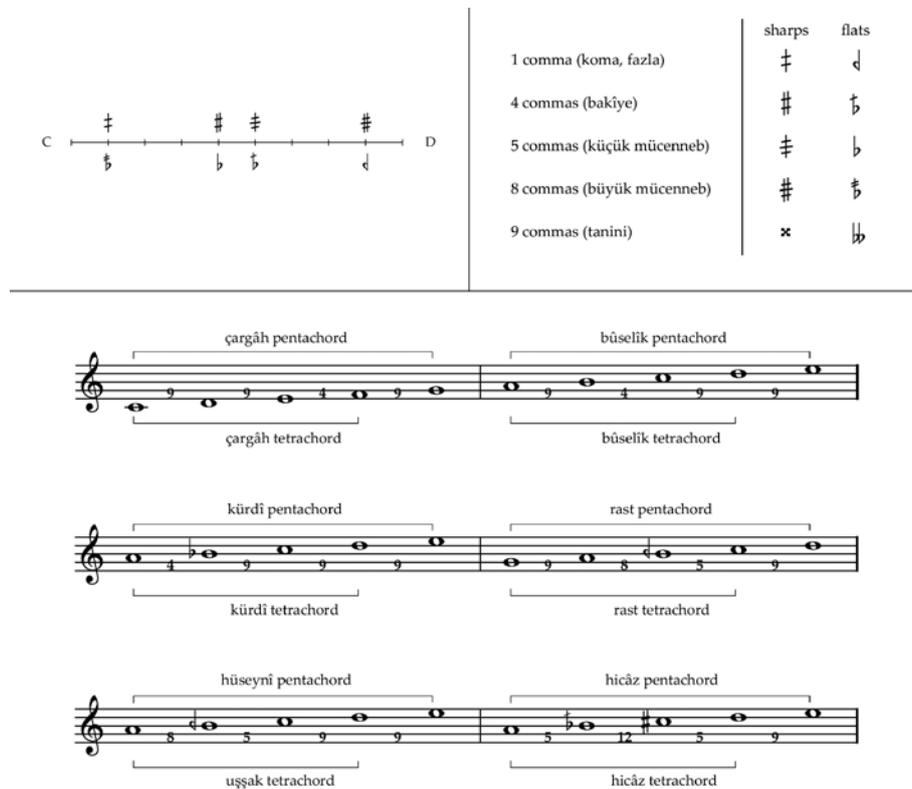


Figure 2. Illustration made by the author. From top to bottom:  
 i) The units of the current theory of intervals and their equivalent sharps and flats in Western music notation;  
 ii) The basic *genres* (six tetrachords and pentachords) of Turkish *makam* theory, as depicted in Murat Aydemir (2012) *Turkish Music makam guide* (pp. 22–23)

<sup>5</sup> The closest approximation of the smallest unit in the current theory of intervals is the Holdrian comma; 53-tet, or,  $[2^{(n/53)}]$ , which for  $n=1$  gives a frequency ratio of 1.0131641 that equals to approximately 22.642 cents of pitch difference. However, Ozan Yarman’s important empirical measurements suggest that practitioners perform intervals even smaller than that of the Holdrian comma. He goes on by saying that a closer approximation to the subtle pitch nuances performed by musicians is of the order of 159-tet (Yarman, 2008: 26–30, 87–128).

<sup>6</sup> Cinuçen Tanrikorur (1994) *Makam and Taksim (improvisation) in Turkish Music*.

Figure 3 shows an example of two modes sharing an identical position on the gamut that can be distinguished only on the basis of their melodic development. As will be discussed later, the *seyir* of a *makam* is mainly transmitted orally, and therefore nuances between different teachers and schools do exist. However, the *outside-time* sketch of each of these prescriptive melodic phases has not been altered much throughout the years. Following on from this, Figure 3 is an illustration made from my personal notes, presenting the *makam Uşşak* and *makam Beyâtî* melodic stages combining Cinuçen Tanrikorur’s and Murat Aydemir’s suggested *seyirs* (Aydemir, 2012: 106–111; Tanrikorur, 1994).

As shown in Figure 3, although *makam Uşşak* and *makam Beyâtî* originate from the same *makam* scale (an *Uşşak* tetrachord and a *Bûselik* pentachord in conjunct juxtaposition), the *seyirs* of the two modes are different:

- *Makam Uşşak* has as a point of entry the first degree of the scale. It will then ascend by binary steps to the fourth degree; the dominant in this case.<sup>7</sup> It might ascend for a while to the sixth degree, but then will descend back to the first degree by binary steps. Its characteristic note is the note *segâh* – note B on the third line; one comma lower than B natural, which in *makam Uşşak* is actually played 2.5 to 3 commas lower – on which the *makam* will suspend while descending. Before concluding on the first degree of the scale, it might move into a *rast* tetrachord from the note *yegâh* (note D, a fifth below the tonic).
- *Makam Beyâtî* has as a point of entry the fourth degree of the scale, the dominant. It will then ascend and remain on the sixth degree until the point at which it reaches the octave above the tonic. It will then start descending by referencing another mode, the *Nikriz makam* shown here with black coloured note heads. Then, it will descend by binary steps to the first degree of the scale. (Fig. 3)

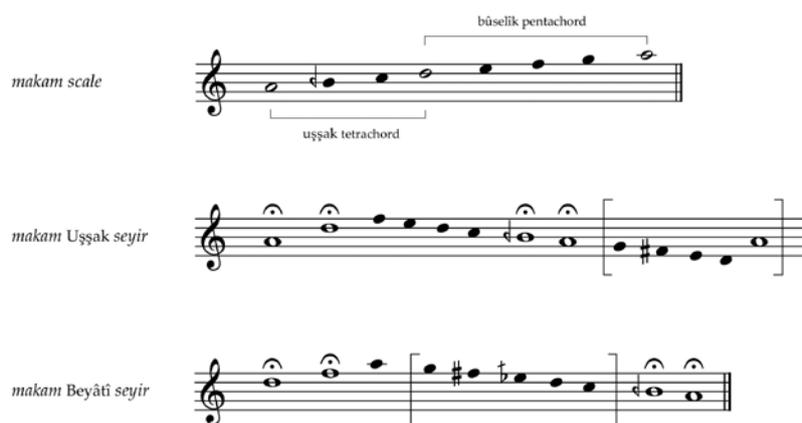


Figure 3. Illustration made from the personal notes of the author.  
An *outside-time* sketch of *makam Uşşak* and *makam Beyâtî* melodic phases,  
combining Cinuçen Tanrikorur’s and Murat Aydemir’s suggested *seyirs*.  
Murat Aydemir (2012) *Turkish Music makam guide* (pp. 106–111) Cinuçen Tanrikorur (1994)  
*Makam & Taksim (improvisation) in Turkish Music* [Online Lecture]

The notion of *seyir* is largely the preserve of the practicing musicians. Its understanding involves an exploration of the modes through a musical instrument, performing the repertoire, as well as imitating through praxis the teacher, who is there to provide verbal instructions regarding the character of each *makam* and guidance on the *in-time* ornamentation. The point of interest is that the modality, or else, the “way” to move and to emphasize certain points in these prescribed paths is taught in a manner that has not changed much since the 17th century. Feldman, in his study, has gathered a vocabulary of twenty-three verbs that appear in Cantemir’s textual instructions, used to describe the *seyir* of a *makam*. As he suggests, these twenty-three verbs are equivalent to approximately nine: “to begin”, “to move”, “to skip”, “to reach”, “to press”, “to manifest itself”, “to ascend”, “to descend”, and “to conclude” (Feldman, 1996: 262–264). (Fig. 4)

<sup>7</sup> The dominant of a *makam* is not always the fifth degree of the scale; it can be the fourth, or even, the third degree. Sometimes, a *makam* might even have more than one dominant like we find in *makam Evîç* for example (Aydemir, 2012: 181).



elements”, where the concept of “notational perspective” can be put into action in order to “identify individual practices of *comprovisation*” (ibid.: 171).

In the next sub-sections, echoing Bhagwati’s suggestions, I aim to document the perspective of my notational methods towards a *comprovisation* practice, and in particular, the ways in which I have been exploring the notion of *seyir* through my notational strategies.

#### 4.2. From Improvisation to Transcription

At the first stages of my research, I mainly focused on developing a transcription-template, that would allow me to transfer into the symbolic level “snapshots”<sup>10</sup> of the *in-time* sounding-gestalt impression of my improvised material. At the same time, I was exploring ways in which this transcription-template could be transformed into a notational device through which I could communicate to other performers the physical movements and the various actions required to arrive at a particular sound-configuration. This two-fold, quasi feedback-loop objective was explored through practice in several trial attempts,<sup>11</sup> while drawing on the work of Richard Barrett, Aaron Cassidy, Klaus K. Hübler, Helmut Lachenmann, and Bogusław Schaeffer.

The still under development notational scheme is shown in Figure 5. It comprises a tablature stave-structure that allows the “decoupling of the various activities of sound production” (Cassidy, 2013: 308) and dissociates the left from the right hand. The approach involves combinations of descriptive as well as prescriptive notational types.<sup>12</sup> In particular, a performer is presented with information concerning:

- bow technique (*arco ordinario*, *arco tratto*, *col legno ordinario*, *col legno tratto*);
- bow pressure (*molto flautando*, *flautando*, *normal*, *pesante*, *poco pesante*);
- relative bow position, using a 7-line tablature combined with two clefs (from bridge to nut, or, from bridge to ‘*sul tasto*’); and,
- on-string placement, using a 4-line tablature combined with two clefs (from ‘*tasto*’ to bridge, or, from bridge to tailpiece).

Similarly, information is given concerning the hand controlling the body of the instrument, including the parameters of:

- relative hand position, using again a 7-line tablature in combination with its respective clefs;
- finger pressure (harmonic, intermediate, normal);
- finger technique, which involves either the use of one finger, alternations between fingers, or, chordal positions; and,
- on-string placement.

Gestural shapes are notated on the tablatures using graphic notation, involving either specific areas (points), or transitions (lines) between areas of the respective canvases (clefs). The metrical structure of these shapes is given either as fixed-time events, or as graphical rhythmic notation, combined with a sign of the form  $X[Y]$ . Numeral  $Y$  is an integer multiple of one second. Numeral  $X$  is the denominator of the ratio  $Y/X$ . The time-frame ( $T$ ) of *either* changes between points (e.g. on-string placement changes) *or* transitions between areas (e.g. left/right hand movements) is given by the formula:  $\frac{Y}{X} \leq T \leq Y$ . The design of the symbol indicates the spatio-temporal gestalt character of the shape. An example is shown at the bottom of Figure 5, which can be understood as: “*create a continuous (arrow) and ‘irregular’ (graphic figure) gesture within the area of the canvas (clef) indicated by the circles (points), allowing each transition (line) to occur within a time-frame –  $T$  of:  $1.5 \text{ sec} \leq T \leq 3 \text{ sec}$ ”.*

<sup>10</sup> “... it is necessary to distinguish structures, architectures, and sound organisms from their temporal manifestations. It is therefore necessary to take ‘snapshots’, to make a series of veritable tomographies over time, to compare them and bring to light their relations and architectures, and vice versa” *sic.* (Xenakis, 1992: 192).

<sup>11</sup> These trial attempts resulted in several musical pieces, such as: *speculative or creative* (2013), for string quartet; *the theme is one of the variations* (2013), for violin and computer; *alba* (2014), for violin and electronics.

<sup>12</sup> As violinist Mieko Kanno writes, descriptive notation “informs us of the *sound* of a musical work”, while prescriptive notation “informs us of the *method* of producing this sound” with “the outcome becom[ing] known only by following process orientated instructions” (Kanno, 2007: 232, 235).

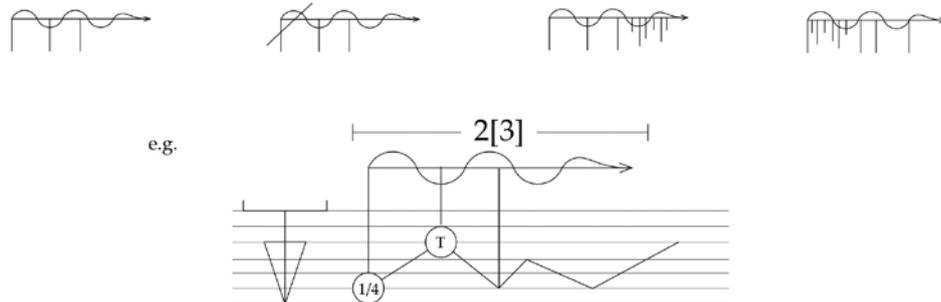
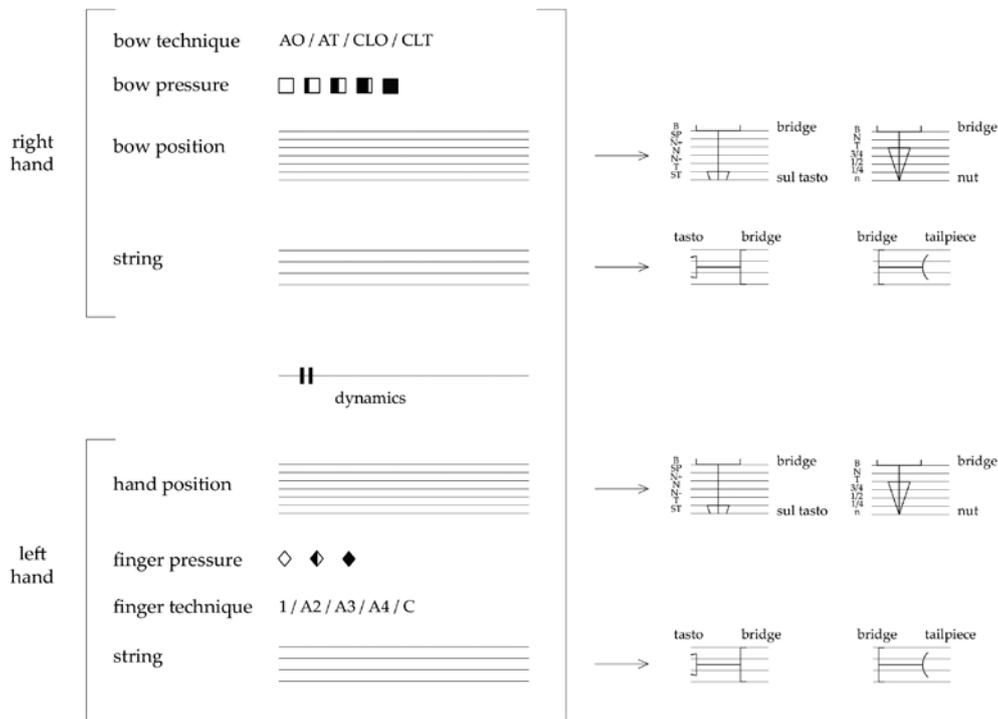


Figure 5. From top to bottom: i) A template of the notational scheme; ii) Graphic rhythmic notation symbols used to notate the gestural shapes on the tablatures (from left to right: *irregular*; *as-fast-as-possible and irregular*; *accelerando*; *raletando*), including an example of the time-frame duration

Following on from this, the performer is suggested to explore, *in-time*, the interplay between three main statistical levels of *temporal* structure:

- 1) the time-frame of the actions required, and the spatio-temporal gestalt character of each dissociated gestural shape;
- 2) the *temporal* geometry of the aggregated gestural shapes that yield a sound-configuration, or else a sounding-gestalt with its own modality;
- 3) the overall duration and the dynamics of a sounding-gestalt, notated on the middle line (neutral clef) of the scheme shown in Figure 5.

Thus far I have transcribed more than twenty sound-configurations, which I consider as the gamut of my current improvisation performance-practice. These have been ordered into a general scale with regard to the relative physical effort they demand. At the same time, these twenty sounding-gestalts also act as the *outside-time* category of my current *comprovisation* practice involving instruments of the violin family and other performers. Figure 6 shows one of these twenty sound-configurations as a continuous *outside-time* entity.

Figure 7 shows the same sounding-gestalt coupled with a metrical sequence notated on the middle line of the scheme. Figure 8 shows a selection of six sound-configurations from the twenty comprising the gamut.

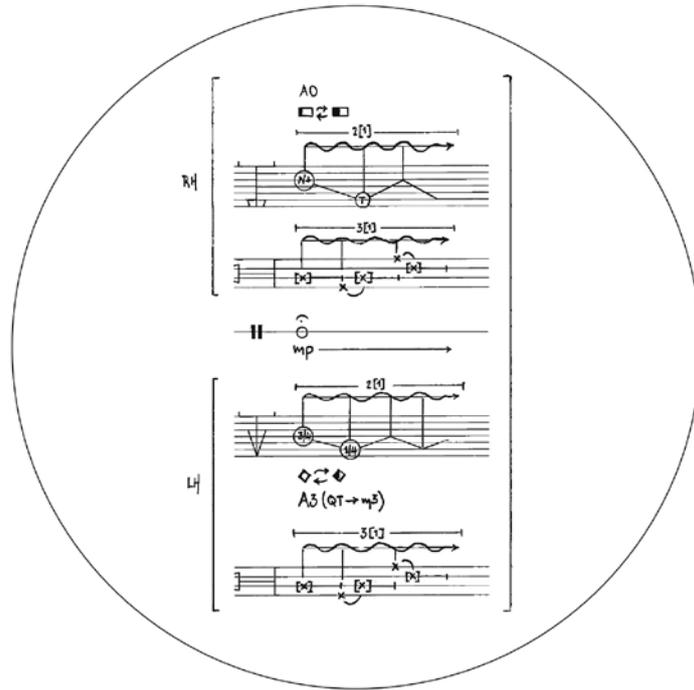


Figure 6. A sound-configuration as a continuous *outside-time* entity

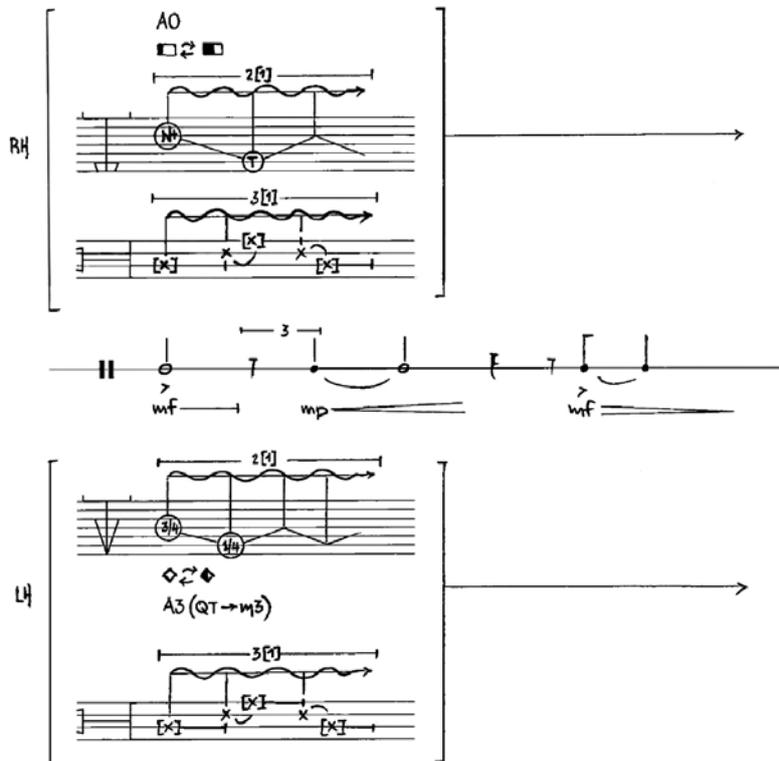


Figure 7. The sounding-gestalt of Figure 6 coupled with a metrical sequence notated on the middle line of the scheme

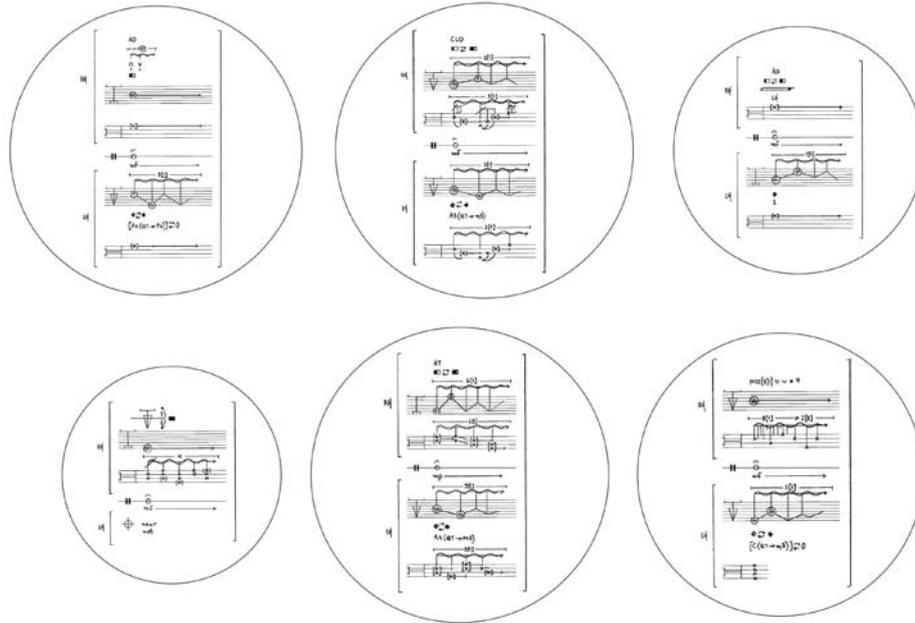


Figure 8. A selection of six sound-configurations from the twenty comprising the gamut

### 4.3. From Transcription to *Comprovisation*

My second aim was to develop a notational device that would allow me to communicate to other performers types of modulation<sup>13</sup>, and melodic movement between the sounding-gestalts of the general scale. In a similar manner to Dimitrie Cantemir’s vocabulary of verbs used to describe the *seyir* of a *makam*, I have introduced seven types of possible modes of transition, in the form of textual instructions (verbs) combined with a graphic symbol. (Fig. 9) Different melodic movements, or *seyirs* if you like, can be created by combining these types with the twenty sound-configurations of the gamut. These textual and graphic descriptors, depending on the sounding-gestalts with which they are combined, aim to denote either, differences regarding sound-production parameters and actions required; divergences in respect of the *temporal* geometry of the aggregated gestural shapes; or variances in terms of the relevant physical effort required while modulating/transitioning. Thus far, I have been exploring various melodic movements between the sound-configurations of the general scale, either as a pre-compositional tool, or as the score of a *comprovisation*.

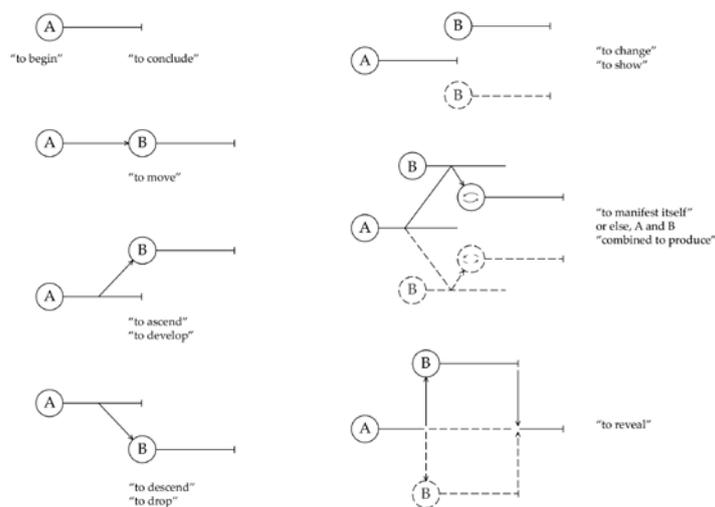


Figure 9. Seven types of possible modes of transition between sound-configurations

<sup>13</sup> Modulation here, echoing *makam* music, is understood as a process of uniting different *outside-time* sound-configurations.

When these are used as a pre-compositional method, the developed *seyir* functions as an *outside-time* sketch of the overall structure of the composition. As I mentioned earlier, due to the design of the notational scheme three levels of metrical structure can be introduced: i) the spatio-temporal character of each dissociated gestural shape; ii) the temporal geometry of the aggregated gestures; and iii) the duration of a sound-configuration as a whole. This allows a significant amount of freedom to compose in detail the *temporal* dimension of a composition that favours, in the words of Bhagwati, “context-independent” performance elements. Figure 10 shows part of a *seyir* developed through improvisation, and later used as a pre-compositional tool for my piece, *alba* (2014) for violin and electronics. In this example (Fig. 10), the type: “to manifest itself” (see also Fig. 9) acted as the *outside-time* prescriptive path of melodic relation between the two sound-configurations, which, after being coupled to a *temporal* structure notated on the middle line of the notational scheme, was translated into a compositional element: in particular, bar twenty-two of the score. (Fig. 10)

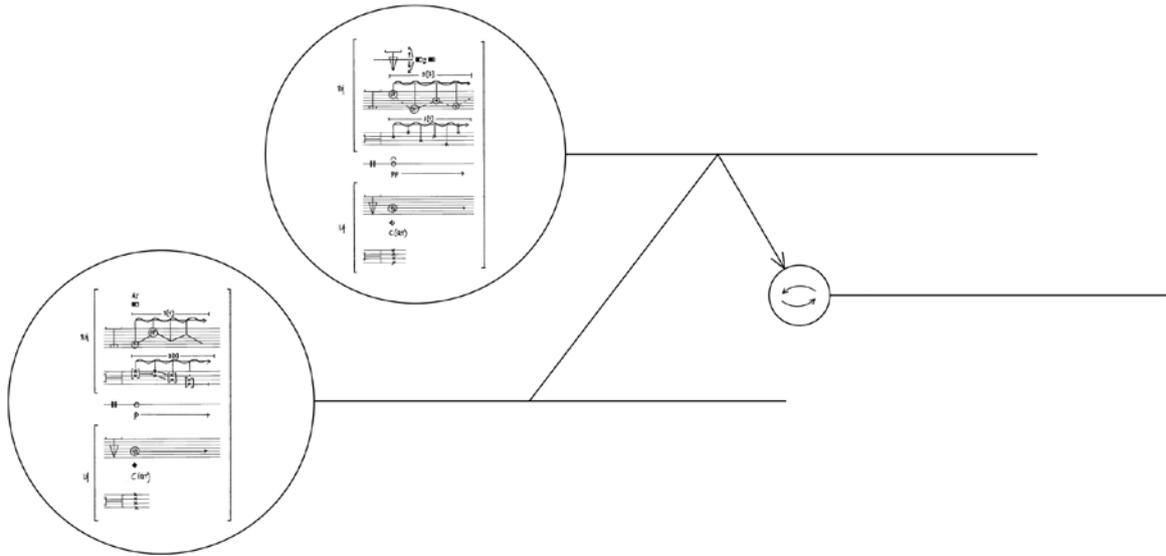


Figure 10. From top to bottom: i) Part of the developed through improvisation *seyir*, later used as a pre-compositional tool for the piece, *alba* (2014) for violin and electronics.

ii) Bar 22 of the score where the melodic type: “to manifest itself” (see Fig. 9) between the two sound-configurations (top figure) was translated into a compositional element of the piece

When the resultant combinations are used as notational devices illustrating modes of modulation and transition between the sound-configurations with the aim of giving performers a setting for structured improvisation (*comprovisation*), then the score consists of two parts:

- 1) the micro-level, where the performer is provided with a list of all sound-configurations of the piece, each accompanied by a sound-file in an attempt to reconfigure in a quasi oral-tradition approach the composer–performer relationship, and
- 2) the macro-level, where the processes of mobility and relationship between the sound-configurations are presented following the seven types shown in Figure 9. The challenge for the performer is to improvise with the material and to explore the *seyir* of the piece; the modes of melodic movement between the sounding-gestalts. (Fig. 11)

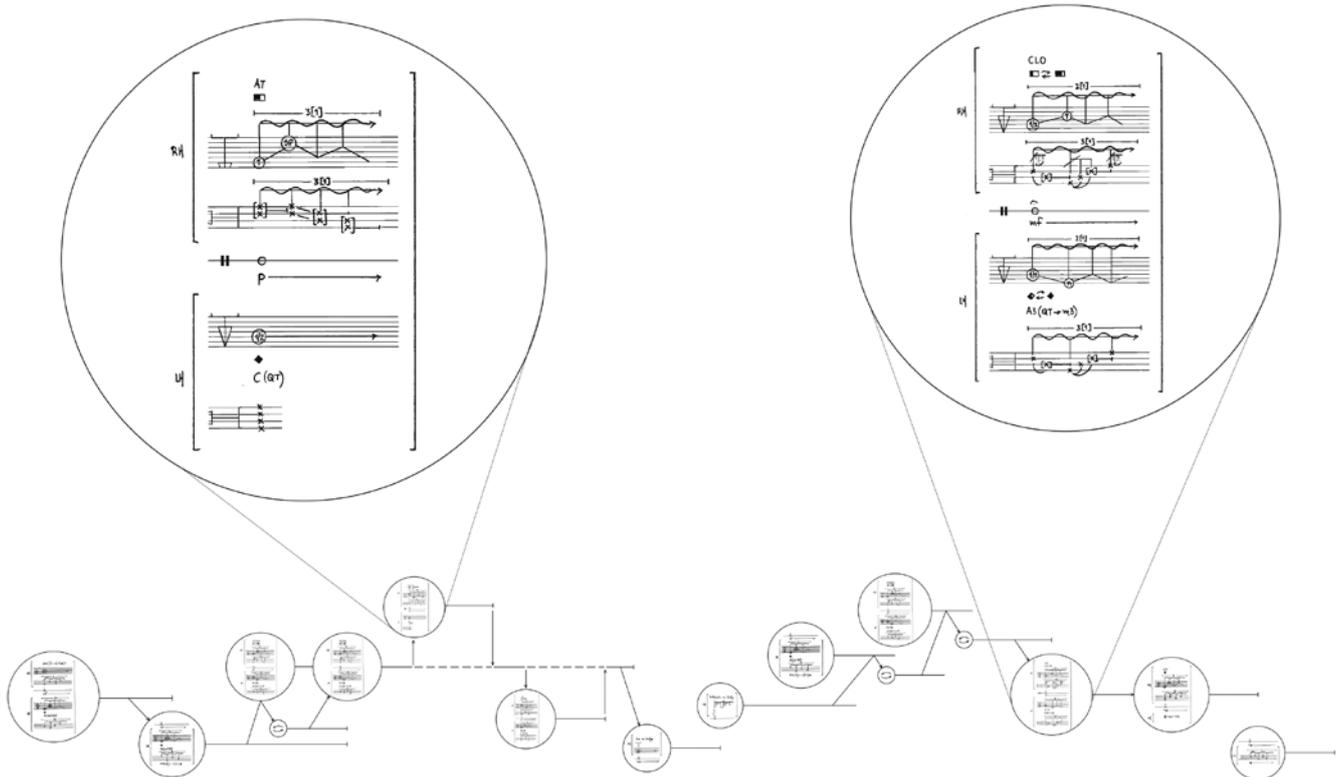


Figure 11. A *seyir* between the sound-configurations of the gamut as a notational device for improvisation

## 5. Epilogue

The compositional practice and its notational perspective presented above originated from a need to communicate the *in-time* spatio-temporal gestalt character of an improvisation performance-praxis, and to construct, through its symbolic representation, an *outside-time* architecture from which different *comprovisation* settings could be put forward. The musical term *melody* is understood here as a process of modulation, transition and movement between *outside-time* sound-configurations, each carrying its own modality and *temporal* structure. The notational strategy, although complex in its types, aims to emphasize the *trópos* of praxis, and intends to correlate the body of the instrument and the body of a performer into a choreography of sounding-gestures. The notion of *seyir*, borrowed from *makam* modal music tradition, is explored here as the conceptual parameter that links the above elements. The underlying objective is to initiate a dialogue between improvisation/composition practices and Western/Eastern theoretical–aesthetic viewpoints, in order to explore ways in which both the *modal* and the “unquantifiable” (Lachenmann, 1995: 101) can perhaps be re-introduced into our current music-making fields of thought and action.

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## Acknowledgments

I would like to thank my PhD supervisor, Peter Nelson, for his guidance and support; ney player, Harris Lambrakis, for our conversations on *makam* music and his remarks on the *seyir* concept; and Nikolia Kartalou for helping with the digital design of the figures.

## *Seyir* samprata kaip konceptualios ir tipologinės „komprovizacijos“ schema

### Santrauka

Šiame straipsnyje, kuriame remiamasi Iannio Xenakio teorinėmis išvalgomis apie muzikinę architektūrą (pvz., „išorinis laikas“, „vidinis laikas“ ar „laiko sąrangos parametrai“) ir Sandeepo Bhagwati „notacinės perspektyvos“ bei „komprovizacijos“ (sąvoka, apibrėžianti improvizacinių ir kompozicinių praktikų susiliejimą) sampratomis, pateikiami asmenine empirine patirtimi pagrįsto tyrimo kontekstas ir rezultatai.

Pastaraisiais metais autorius ieškojo būdų, kaip išversti savo smuiko improvizacijų laiko struktūrą ir vidinio laiko modalumą į simbolių kalbą, kad galėtų sukurti notacinę strategiją komprovizacinei praktikai drauge su kitais atlikėjais. Šio proceso eigoje teko patyrinėti modalinės muzikos tradicijos išorinio laiko architektūrą. Straipsnis supažindina su *seyir* samprata (ji Vidurinių Rytų makamo muzikoje apibrėžia melodinių frazių plėtotę pagal iš anksto nustatytą planą pasirinktame makamo garsaulyje ir nurodo tam tikrą makamo derinį pobūdį), taip pat su įvairiais būdais, kuriais ji konceptualiai ir tipologiškai paveikė makamo notaciją. Remiantis *seyir* samprata ir makamo modaline muzika, šiame straipsnyje melodijos sąvoka traktuojama kaip judėjimo moduliacija ir *trópos* (gr. τρόπος – „kelias, kryptis, posūkis“) tarp skirtingų garso konfigūracijų. Kartu siekiama sugrąžinti modalumo sąvoką į šiandieninę muzikavimo praktiką.

**Reikšminiai žodžiai:** komprovizacija, improvizacija, kompozicija, *seyir*, *trópos*, modalumas, išorinis laikas, laiko sąrangos parametrai, vidinis laikas, muzikinė notacija, tabulatūra, geštaltas, garsinis geštaltas, garsinė konfigūracija, melodija, Iannis Xenakis, Vidurinių Rytų makamo muzika.

## On the Instrumentation of the Melody Line in Alessandro Rolla's Symphonies D4 and e1 (1803–1811)

### Annotation

The aim of this paper is to look at the design of the melody line and in particular the usage of the violin parts (first and second violins) in Rolla's symphonies D4 and e1 (1803–1811) from a music-analytical perspective. The following aspects are presented in details: octave doublings of the melody line within a movement, as well as the participation of the low strings in the performance of the melody and the relationship (also, in the performance of the melody) between the first and the second violins firstly and secondly between the violins and the woodwinds. The one-movement symphonies e1 and D4 are of high art with respect to the instrumentation and were unfortunately largely ignored until now by artists and researchers. The aim of this paper is also to draw the attention of the music world on these long-neglected instrumentation jewels.

**Keywords:** Alessandro Rolla, symphony, tone-colour analysis, instrumentation, melody line, statistics.

Alessandro Rolla's artistic accomplishments are remarkable. Near the end of the 18th century he was considered to be one of the greatest violist in Europe, around 1795 he was Pagannini's teacher and since 1792 he was also the conductor of the royal court orchestra in Parma. As a conductor, Rolla sustainably shaped the musical life of northern Italy. Many symphonies by Beethoven and Haydn were played in Milan under his leadership; he conducted at La Scala many operas by Rossini, Bellini and Donizetti and also conducted the premier of Bellini's *Norma*.

Rolla's compositional accomplishments are also of great importance. Through his compositions he helped in making the viola, up until then little used as a solo instrument, into one equally appreciated one as the violin (Tumat, p. 295). He also composed eleven ballets and many chamber music works with different instrumentations. His symphonic oeuvre includes twelve symphonies, most of which are not edited until today.

Even though Rolla's accomplishments both as a conductor and as a composer are very significant, there are almost no music-analytical papers about his work (except: Inzaghi 1982 and Inzaghi 1984). There are in fact no music-analytical studies of his symphonies.

The aim of this paper is to look at the design of the melody line and in particular the usage of the violin parts (first and second violins) in Rolla's symphonies D4 and e1 (1803–1811) from a music-analytical perspective. The following aspects are presented in details: octave doublings of the melody line within a movement, as well as the participation of the low strings in the performance of the melody and the relationship (also, in the performance of the melody) between the first and the second violins firstly and secondly between the violins and the woodwinds.

Rolla's twelve symphonies can be sorted into four categories, according to dating:

Before 1800:

D3 (strings, 2 cor, 2 ob)

D5 (strings, 2 cor, fag, 2 ob, 2 fl)

1803–1811:

D4 (strings with 2 vla parts, 2 cor, 2 fag, 2 cl, 2 fl)

e1 (strings with 2 vla parts, 2 cor, 2 fag, 2 ob, 2 fl)

Around 1805:

C1 (strings, 2 cor, fag, 2 cl, 2 fl)

D1 (strings, 2 cor, fag, 2 cl, 2 ob, 2 fl)

D2 (strings, 2 cor, 2 fag, 2 ob, 2 fl)

Possibly after 1816:

Bb1 (strings with 2 vla parts, 2 cor, 2 cl, 2 fl)

Bb2 (strings, 2 cor, 2 fag, 2 ob, 2 fl)

Date unknown:

D6 (strings, 2 cor, 2 fag, 2 ob, 2 fl)

D0 (at least 2 vl)

Bb0 (strings)

Symphonies D4 and e1 are the only ones, which were edited in the second half of the 20th century (Longyear, p. 1–33) and only have one movement. Both have a nearly identical instrumentation: strings with split viola voices, two horns, bassoons and flutes. D4 also has two clarinets in C, while symphony e1 has two oboes instead of two clarinets.

The musical form of the two symphonies is (Ex. 1):

Symphony	Tempo indication	Formal section	Measure
e1	adagio	introduction	1–14
		exposition	15–111
		first subject	15–34
		transition	35–57
		second subject	58–84
		closing section	85–111
		recapitulation	112–220
		first subject	112–140
		second subject	141–167
		closing section	168–220
D4	larghetto allegro	introduction	1–9
		exposition	10–148
		first subject	10–29
		transition	30–43
		second subject	44–97
		closing section	98–148
		recapitulation	149–305
		first subject	149–162
		transition	163–176
		second subject	177–238
closing section	238–305		

Example 1. Musical form of A. Rolla's symphonies e1 and D1 (overview)

Both symphonies have a very similar form. They have no development, both have a slow introduction, the closing section is not proportionally long and the formal parts before the second subject last for a relatively short time.

Although both works have a very similar music form, they are completely different according to the tone-colour design of the melody line. In order to obtain tangible research results on the instrumentation of the melody line for the entire symphony, it would be of fundamental importance to consider all tone-colour constellations of the melody line from an overarching perspective.

The tone-colours of a melody change within a symphonic movement several times. This results in a huge amount of data, which describes the course of the instrumentation, which in turn makes the overview of such processes extremely difficult. It is, therefore, necessary to develop a system that illustrates the course of such tone-colour processes. Two different approaches were developed for this tone-colour analysis:

- Illustration of the tone-colour constellations in a tabular form;
- Description of the constellations through symbols.

The abstraction of the sound dispositions in a tabular form has, on the one hand, the advantage (in terms of the large-scale form) that they clearly display timbral processes on the one side. Such tables can provide information about long-term trends of the instrumentation of the melody line that would otherwise remain hidden because of the big size of a symphony movement (Beran, 2004).

The description of the tone-colour combinations of the melody line with symbols has, on the other hand, the advantage that one can compress all the tone-colour data of a symphony on only a few lines. However, the review of these processes becomes much more difficult as the data compression increases.

In order to achieve just that it is necessary to develop a system, which compresses as many tone-colour constellations in a clearer way on one side with tables. As a result, long-term tendencies are visible, something which would not be possible through the many different changes of instrumentation from beginning to the end of a movement.

The first row of such a table gives an orientation about the form disposition of the movement. Different colours and symbols are introduced for the representation of the different places where the melody is doubled in octaves. The colour gray signifies the “octaving” of a melody and the symbol “X” signifies that a melody is played two octaves higher. The colours give no information about the position, but describe the final relation that two melodies have.

The second row of every table describes the number of bars of the respective motifs, where an “octaving” and/or duplication take place, and the last describes the interval where a melody is not in unison octaves. The instruments are listed from bottom to top according to the arrangement of a modern score. The tabular representation of the various manifestations of a motif allows us to gain insight into the tone-colour characteristics of this motif, which would otherwise have remained hidden only from reading the orchestral score.

In order to describe the system in practice, the melody line of bars 39–56 of Symphony e1 is exemplified. In Example 2a the instruments which play the melody are noted with a colour (black, gray: an octave higher, symbol “X”: two octaves higher)<sup>1</sup>. Example 2b shows the tone-colour constellations in a tabular form. The first violin, as expected, plays the most important role (four constellations). The remaining three, however, are completely different from each other (one melody in octaves, another in thirds and the third in two octaves). Due to the tabular representation of the tone-colour constellations, it is now easier to expand the tone-colour space and to pursue the development of the melody line.

\*M. 41, ob I: Erroneously C in part. \*\*M. 41, vl I: Ornament erroneously written on C.

Example 2a. Rolla, Symphony e1: Bars 39–56 (Longyear, p. 25)

<sup>1</sup> Measure 39–42: Vln. 1 / measure 43–45: Vla, Octave higher: Vln. 1 with Ob. 1 and Fl 1 / measure 46–49: Vln. 1 / measure 50–52: Violins in thirds doubled by oboes and flutes also in thirds / measure 52–53: Vln. 1 / measure 53–54: Bass with Vla and Fag in unison, octave higher: Violins and Ob. 2, two octaves higher: Ob. 1 and Flutes / measure 54–56: Vln. 1.

Bar	39	43	46	50	52	53	54
Fl.1		■		■		X	
Fl.2				■		X	
Ob.1		■		■		X	
Ob.2				■		■	
Fag.						■	
Vln.1	■	■	■	■	■	■	■
Vln.2		■		■		■	
Vla.						■	
Bass						■	
Interval				3rd			

Example 2b. The tone-colour constellations of the melody line of Example 2a in a tabular form

Example 3 lists all tone-colour constellations of the melody line of Rolla's Symphony e1. The following results are clear after examining Ex. 3:

1. The instrumentation of the melody line is changed a total of 45 times within 215 bars.
2. In the vast majority (40 times), the violin is used for this change.
3. In the constellations with one instrument (17 in total)<sup>2</sup> the violin again plays the most important role.
4. In the constellations with two instruments (8 in total) the combination of the first violin with the first flute playing one octave higher appears six times.
5. Up until Bar 28, the instrumentation changes ten times. All these ten constellations are different. This means that Rolla tries to avoid tone-colour repetitions from the beginning until the transition of the development. The tone-colour of the melody line remains until this point extremely varied.
6. From the 45 constellations, only 17 are repeated during the entire symphony. This shows how varied Symphony e1 by Rolla is with respect to the tone-colours.
7. The melodies in unison with or without octaving (34) are three times more than the melodies in thirds, sixths and tenths (11). From these 11 constellations however, only one show tone-colour repetition (measure 50 correlates with measure 215).
8. The second theme (measure 58, 59, 141, 152 and 168) appears five times in total, always with a different instrumentation.
9. The brass instruments do not participate in the melody line design; on the contrary, the bassoon does so very often.
10. The second violins never double the first ones when the two instrument groups play the melody alone.
11. The lower strings (Vla. and bass) are used relatively often.

Rolla tries through different instrumentations to create a sound, which is as varied as possible. Some of his strategies are:

- Relatively often instrumentation changes (point 1)
- Avoiding tone-colour repetitions (points 5 to 8)
- Different instrumentations of the second theme (point 8)
- On the other hand, he tries to gain the attention of the listener through specific combinations which are constantly repeated (points 2 to 4)

<sup>2</sup> Measures 5, 15, 31, 46, 52, 54, 65, 79, 95, 119, 135, 137, 147, 158, 174, 193 and 194. The tone-colour constellations are obviously not only one bar long; here we only list the first bar.

e1	Introduction						Exposition (1st subject and transition)										
Bar	1	5	9	10	11	13	15	21	22	28	31	43	46	50	52	53	54
Fl.1	X	■		■				■		■		■			■		X
Fl.2	X		■			■								■			X
Ob.1	X		X		X				■	■		■			■		X
Ob.2	■			■	■	■								■			■
Fag.	■				■									■			■
Vln.1	■			■			■	■	■	■	■	■	■		■		■
Vln.2	■		■			■						■		■			■
Vla.	■																■
Bass	■																■
Inter.			3rd			3rd								3rd			

e1	Exposition (2nd subject and closing section)						Recapitulation (1st subject)										
Bar	58	65	68	75	79	81	85	91	95	112	119	133	135	136	137	140	141
Fl.1	■		X	■		■	X	■		■		■				■	■
Fl.2													■				■
Ob.1													■			X	
Ob.2												■				X	
Fag.			■				■								■		
Vln.1	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■
Vln.2								■				■					■
Vla.															■		
Bass														■			
Inter.							3rd										3rd

e1	Recapitulation (2nd subject and closing section)										
Bar	142	147	152	153	158	168	174	193	194	214	215
Fl.1	■									■	■
Fl.2							X			■	■
Ob.1								■		■	■
Ob.2							■			■	■
Fag.			■	■		■					
Vln.1	■	■	X	X	■		■		■	■	■
Vln.2				■			■				■
Vla.			■			■					
Bass						■					
Inter.			6th							3rd	3rd

Example 3. Rolla, Symphony e1: complete tone-colour constellations of the melody line

D4	Introduction								Exp. (1st subject)					
bar	1	1	2	3	4	5	5	6	11-23 / 151-171					
Fl.1	■	■	■	■	■	■	■	■					X	
Fl.2			■	■			■	■					X	
Clar.1			■			■	■						X	
Clar.2	■	■		■		■							X	
Fag.													■	
Vln.1	■				■	■		■	■	■	■	■	X	■
Vln.2		■	■		■				■			■	X	
Vla.													■	
Bass													■	
Inter.	3rd	3rd	3rd			3rd	6th			6th				

D4	Exposition (transition-closing section)												
bar	37	41	44	46	47	49	51	53	55	57	76	98	124
Fl.1		■	■	■		■						■	
Fl.2		■											
Clar.1			■		■		■	■		■			
Clar.2							■		■				
Fag.						■		■		■			
Vln.1	X		■								■	■	
Vln.2		■	■										
Vla.	■	■											
Bass													
Inter.	3rd	6th					3rd		3rd				

D4	Recapitulation													
bar	181	182	184	186	188	190	207	241	247	249	257	274-276	300	
Fl.1				■		■						■		
Fl.2					■						■			
Clar.1		■	■			■						■		
Clar.2	■										■			
Fag.							■						■	
Vln.1							■	■		■	■	■	■	
Vln.2								■	■	■	■	■	■	
Vla.			■	■				■	■	■	■	■	■	
Bass									■	■	■	■	■	
Inter.	6th		3rd		3rd			3rd	3rd	6th	3rd			

Example 4. Rolla, Symphony D4: complete tone-colour constellations of the melody line

Example 4 lists all tone-colour constellations of the melody line of Rolla's Symphony D4. The following is found:

1. The instrumentation of the melody line is changed a total of 39 times within 300 bars.
2. Contrary to Symphony e1 there are less octavings in the melody (colour gray does not dominate).
3. The colour gray dominates in the beginning of the symphony (measures 1–37); almost no melodies in octaves can be heard between bars 41 and 241 (colour gray completely disappears) and in the remaining bars constellations in two octaves appear again. This arrangement (measures 1–37 / 42–241 / 247–300) does not match the overall form of the symphony. Thus, the musical form has almost no influence on the melody line's tone-colours of this symphony.
4. There is only one melody in two octaves (symbol "X").
5. In contrast to Symphony e1 the first violins do not dominate in the execution of the melody line. Out of the 39 constellations, the first violin pauses in 17 of them. There is even a relatively long section (measures 41–76), where the first violins pause completely, which was not the case with Symphony e1.
6. Similar to Symphony e1, the constellations with thirds, sixths and tenths are here the minority (16 out of 39). Rolla tries again to get the maximum out of his instruments in order to create a sound, which is as varied as possible. Out of these 16 constellations, 13 are different (only bar 1 correlates with bars 51 and 181 and bar 2 with bar 188).
7. As in Symphony e1, the brass instruments do not participate in the design of the melody line; the bassoon again does so very often.
8. The same is true for the lower strings.

Rolla tries in a similar way to create in both symphonies varied sounds. Although the focus of his compositional works is on the violin and the viola and although he is mostly famous for his viola concertos, the tabular representation of the two symphonies shows a completely different picture.

The woodwinds and low strings participate quite often in the design of the melody line. These constellations are moreover usually different from each other. For the construction of such processes (avoidance of tone-colour constellations in the course of the whole movement, different instrumentation of a recurring motif, etc.), the composer requires not only an extraordinary feeling for tone-colours, but also excellent artisanship and knowledge in the field of instrumentation.

In the compositional works of Rolla, characterized with respect to the design of the melody line, there appears to be a tendency for tone-colour variety even there where the instrumentation is limited. He tries in a refined manner to get the maximum out of the limited instrumentation. The one-movement symphonies e1 and D4 are of high art with respect to the instrumentation and were unfortunately largely ignored until now by artists and researchers. The aim of this paper is also to draw the attention of the music world on these long-neglected instrumentation jewels.

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## Apie melodinių linijų instrumentuotę Alessandro Rolla simfonijose D4 ir E1 (1803–1811)

### Santrauka

Nors Alessandro Rolla (1773–1840) pasiekimai tiek dirigavimo, tiek kompozicijos srityse itin reikšmingi, beveik nerasime jo kūrybai skirtų analitinių tekstų. Jo simfonijos iki šiol nesulaukė deramo muzikos tyrinėtojų ir teoretikų dėmesio.

Šio tyrimo objektas – melodinių linijų formavimas ir, konkrečiai, smuiko (I ir II smuikų) partijų bruožai A. Rolla simfonijose D-dur, D4, ir e-moll, E1 (1803–1811). Smulkiau aptariami šie melodinių linijų formavimo aspektai: oktavinis melodinės linijos dubliavimas, žemesniojo registro styginių instrumentų dalyvavimas atliekant melodiją ir santykis tarp pirmų ir antrų smuikų bei smuikų grupės ir medinių pučiamųjų grupės instrumentų (atliekant melodiją).

Nors A. Rolla kūrinuose dėmesį pirmiausia patraukia smuikų ir altų partijos, o pats kompozitorius geriausiai žinomas kaip koncertų altui autorius, patyrinęs šių dviejų simfonijų melodinių linijų instrumentuotę ir garso spalvą paaiškėjo, kad tikrasis vaizdas yra visiškai kitoks.

Kompozitorius dažnai pasitelkia medinius pučiamuosius ir žemo registro styginius, norėdamas suteikti sodresnę atspalvį melodinėms linijoms. Tačiau kaskart šių tembrų deriniai pasirodo šiek tiek skirtingu pavidalu. Kad kompozitoriui kiltų idėja plėtoti tokius procesus (t. y. vengti pasikartojančių tembrinių derinių toje pačioje kūrinyje, pasirinkti kaskart skirtingą instrumentuotę pasikartojantiems motyvams ir pan.), jis turi pasižymėti ne tik išskirtine tembrine pajauta, bet ir instrumentuotės išmanymu bei aukščiausio lygio meistryste.

A. Rolla kūrinuose, straipsnyje analizuojamuose melodinių linijų formavimo aspektu, tembrinė įvairovė pasireiškia netgi tais atvejais, kai instrumentuotės galimybės labai ribotos. Kompozitorius nuolat mėgina rafinuotais būdais išgauti maksimalų efektą iš negausaus priemonių arsenalo. Instrumentuotės požiūriu A. Rolla vienadalės simfonijos E1 ir D4 vertintinos kaip aukštojo meno pavyzdžiai, tad juolab apmaudu, jog kompozitoriaus palikimas iki šiol liko beveik nepastebėtas nei atlikėjų, nei tyrinėtojų. Atkreipti muzikos pasaulio dėmesį į šiuos ilgą laiką pamirštus instrumentuotės šedevrus yra vienas svarbiausių šio tyrimo tikslų.

## Some Types of Melodious Interpretation of the Monogram: A Case Study of the Monogram by Maija Einfelde (E-F-[E]-D-E)

### Annotation

The use of monograms is frequently characterized by composers who tend to a dramatic and philosophical way of expression, subtexts that must be decoded. It is also significant that some outstanding users of musical monograms from different epochs have common stylistic features. Worth mentioning are the influences that the music of Johann Sebastian Bach exerted on Dmitry Shostakovich. Meanwhile the contemporary Latvian composer Maija Einfelde (b. 1939) recognizes that the music of Shostakovich has had a great impact on her early works. An important and frequently used sign in the music of Einfelde is her monogram E-F-[E]-D-E. This melodious formula itself does not have such individualised mood as B-A-C-H or D-Es-C-H, however in the works by Einfelde it sounds very expressive as it is used in various interesting melodious contexts.

The aim of this article is to study these contexts. The main attention will be paid to the following aspects and their role in the expressivity of the monogram:

- variety of registral dispositions;
- interaction with other melodious elements;
- textural context.

The research contributes to the understanding of the musical style of Einfelde, and aims to enrich insights of the general interpretation tendencies of monograms – melodious important signs in the music of various composers.

**Keywords:** monogram as a melodic sign, Maija Einfelde, registral disposition, interaction with another pitches, verticalisation.

### 1. Introduction

In various periods of music history, multiform arts of typified melodic patterns have been developed. These are inspired both by real environment and human activities (e.g., the so called fanfare intonation), and by different effects (e.g., several rhetorical figures – *passus duriusculus*, *pathopoiia*, etc.). The monogram could also be perceived as similar typified patterns. In contrast to many other melodic signs, the origin of the monogram is always to some extent accidental, namely, a composer obviously cannot choose the monogram only in accordance with his musical preferences, as he needs to take into account the letters of his name. This is probably the reason why many composers have never used monograms in their works. However, there are also well-known cases in music history where a monogram, despite its accidental origin, symbolizes not only the name or surname of its owner, but also the emotional mood of their music, the substance of their musical style. The motif B-A-C-H certainly belongs to the earliest cases of such symbolic correspondence. Its main substance is a succession of two minor seconds or so-called sigh motifs – sounds expressive and mostly dramatical due to its chromatic character. The visual similarity of the graphical representation of these four pitches to a cross is especially important for Bach's music that reflects the ideas of passion, crucifixion and resurrection. The works by Bach also show how different the interpretations of a monogram can be. They preserve the general tragic mood of this melodic sign and at the same time highlight a great variety of nuances.

For example, the air *Blute nur* from the St Matthew Passion (1727) can be mentioned, where the composer has used an inversed and also less chromatic version of the monogram which has slightly softer character than the original one. Another interesting example is the theme of the last fugue from the first volume of *Well-Tempered Clavier* (1722). It contains the succession of two descending minor seconds which is a characteristic feature of this monogram, however, the distance between these intervals is broader than in the original B-A-C-H; besides, this motif appears three times, and the upper second ascends progressively higher with each time. Musicologist Boleslaw Jaworski has expressed a hypothesis that this melody symbolizes "The Procession to Calvary" (quoted after Носина 1993: 37) – a hard climbing of Jesus to Golgotha when he carried his own cross. This, of course, is only an assumption without evidence, however, it does not contradict the character of this fugue. Frequently used is also a transposition of B-A-C-H. For instance, the ending of the Prelude D major from the second volume of *Well-Tempered Clavier* (1742) could be named: a succession F-E-G-Fis is hidden in some of the middle voices of the last chords. The musicologist Günther Hartmann describes it as a possible "BACH-Signatur" (Hartmann 1996: 920).

Another example of an excellent accordance of the monogram with the style of the composer is D-Es-C-H by Dmitri Shostakovich. It is symbolic that there is a melodic relationship between this sequence and B-A-C-H; and although this similarity has incurred accidentally it rightly reflects the Shostakovich's response to Bach.

Musicologist Olga Juferova, who has researched the use of monogram in music, distinguishes two models of its interpretation – the exoteric and the esoteric (Юферова 2013). Juferova also names the **exoteric** model as a logogram. A characteristic feature is an open, demonstrative use of a monogram – it is not hidden, but rather declared in the title of the work as, for example, the Variations on the name *Abbe* by Robert Schumann (1829/30), or is otherwise highlighted, as in the First Prelude by Shostakovich from his Twenty-Four Preludes and Fugues (1950/51). The motif D-Es-C-H with an inverse succession of the first two pitches here concludes an eight-bar structure and, as Natalya Naiko notes, becomes the first derogation from the previous diatonic scale (Найко 2011: 85).

The **esoteric** model can be described as a cryptogram. It means that the monogram is partially hidden, it will be revealed only by the most erudite listeners, and in this case it often reflects a very personal message of the emotional experiences of the composer. Such cryptograms are sometimes used by Shostakovich. So notes the musicologist Judith Kuhn: “In the Tenth Symphony, the interaction [of D-Es-C-H – *B. J.*] is with a cryptogram for Elmira Nazirova, a composition student who functioned as his muse for this work” (Kuhn 2010: 188).

The aforementioned musical examples show that the content of a monogram is only to some extent independent from the will of the composer and it could be manifested in diverse individual ways. The aim of this article is to answer the question: how the music by Latvian composer Maija Einfeldē (b. 1939) looks in this context.

In her works, the monogram appears as E-F-D-E or E-F-E-D-E. These melodious formulas themselves do not have such individualised expression like B-A-C-H or D-Es-C-H. And exactly for this reason transformations of these melodic signs, as well as their context, which attaches the distinctiveness of the monogram, are very interesting. An interpreter of the music by Einfeldē, the violinist Jānis Bulavs notes:

“An improvisatoric character is strongly expressed in the music by Maija. In each composition she concentrates so much excellent musical material that any other composer would create four or five works on this basis” (Bulavs 2010: interview).

The richness of the imagination mentioned in this quote also results in highly varied interpretations of the monogram that will be discussed further in the article.

## 2. Monogram E-F-[E]-D-E in the context of the musical style of Maija Einfeldē

### 2.1. Various registral versions

The first feature which deserves attention is the variety of the registral content of the monogram – namely the pitches E, F and D can appear not just adjoining, but also scattered over different registers. An example is the cycle *The Sad Serenades* (*Skumjās serenādes*, 1988) for clarinet and string quartet. This work has the subtitle *Three Songs for the Dying Sea*, and it was inspired by the topic that was important in Latvia during the final decade of the Soviet occupation (until 1991) and in the following years – namely, the writers and composers of this period often turned to the theme of urbanization and its dangerous consequences for the homeland's nature<sup>1</sup>. *The Sad Serenades* by Einfeldē are dedicated to the Baltic Sea and the instruments frequently imitate the lonely and plaintive voices of seabirds. The use of the monogram reflects the composer's highly personal attitude towards the sea (in the first half of the 1970s she sometimes spent her summers at the beach in Bērziems).

In Example 1 the pitches of the monogram are used in the part of the first violin and then in the part of the viola. Consequently the seconds E-F and E-D are transformed into ninths, which are mostly descending, sometimes also into sevenths. However, in this case the shrillness of these intervals is softened with the performance indication ‘dolce’.

Another example is the piano piece *Albumleaf* (*Albuma lapa*, 1988). Here the composer has given two versions of her monogram which could be characterized as a manifestation of her two egos – perhaps a certain analogy to Eusebius and Florestan by Robert Schumann. The first manifestation is found in the very beginning of this work (Ex. 2, mm. 1–3) where the pitches of the monogram are given in a little transformed succession, also not E-F-E-D-E, but rather E-F-E-D. The main intervals in this version are seconds, therefore it appears to be flowing and sounds melodious, like a melancholic cantilena, and reflects the lyrical, neoromantic aspect of Einfeldē's music. The impact of the waltz must also be mentioned. In this respect, it is significant that the

<sup>1</sup> Other examples are the Seventh Symphony by Ādolfs Skulte with the title *Preserve Nature!* (1981) and works by Pēteris Vasks with the imitation of the voices of birds (the piano fantasy *Landscapes of the Burnt-out Earth*, 1992, et al.)

Example 1. Maija Einfeldė, *The Sad Serenades*: see mm. 31–33 (violin 1) and 35–39 (viola)

Example 2. Maija Einfeldė, *Albumleaf*: the beginning

creator of many piano waltzes Fryderyk Chopin is one of Einfeldė’s favourite composers. This follows from her statement that also reflects the possible autobiographical background of the interaction between the elements of the waltz and the monogram:

“It is admirable how such a pedant like Chopin can be so poetic. Every note to him is important and has its own place, and it is unlike Liszt, from whose works we can take out entire texture layers, and it will sound good anyway. In my youth, I had a dream of becoming a pianist – interpreter of Chopin, unfortunately it was a post-war period and I did not have the privilege of systematic piano lessons” (Einfeldė 2012: Interview).

The second version of the monogram is found in measures 7–10 of Example 2. It reflects a drastically different aspect of the personality and also of music of Einfeldė. The melodic line is not flowing, but rather broken, and the waltz could be perceived as a desperate attempt to forget any painful memories which recall themselves all the time with the sharply dissonant stitches of the minor ninths and with sforzando accents. The recognition by Einfeldė could be mentioned here: good music is able to torment just like the novels by Fyodor Dostojevski (Einfeldė 2012: Interview).

## 2.2. Interaction of the monogram with another pitches

The monogram by Einfelds frequently appears in close interaction with other pitches. They may be different, however almost always an interval of the tritone can be heard. In many cases, it appears as a diminished fifth between the highest pitch of the monogram, namely, F, and the pitch H<sup>2</sup>. An example is the third movement from the already mentioned cycle *The Sad Serenades*. A revolving figuration is based on the pitches of the monogram, E, F and D, which are given in a transformed succession, and also a pitch H is added. Later the same pitches are sharply and aggressively repeated fortissimo risoluto, and it seems that they rightly reflect an idea of a fatal inevitability that follows from the subtitle (*Three Songs for the Dying Sea*: see Ex. 3).

Example 3. Maija Einfelds, *The Sad Serenades*: movement 3, mm. 52–55

We can find a partially similar expression in the second movement from the Sonata-Meditation by Maija Einfelds (1982/83). The last (second) version of this work was dedicated to the memory of Jānis Ivanovs (1906–1983) – the former teacher of Einfelds at the Jāzeps Vītols Latvian State Conservatory (nowadays the Music Academy). The work includes stylistic allusions to the music by Ivanovs: it begins with the quote from his piano piece *Andante Replicato* (1963). However, here some impact by Shostakovich can also be seen; Einfelds recognizes that she was influenced by both these great symphonists although they are very different (“in contrast to Shostakovich who prefers long polyphonic development, Ivanovs tends to the splitting and elaborating of brief motifs” – Einfelds 2012: Interview). In this case, the relationship to Shostakovich is manifested in the frequent use of the lowered mode that various researchers have mentioned as a characteristic feature of music by Shostakovich<sup>3</sup>, and also in the interpretation of the whole cycle because such a structure of sonata is never found in the works by Ivanovs, but it is characteristic for the final composition by Shostakovich: his Sonata for Viola and Piano (1975). Namely, there are three movements in the Sonata-Meditation by Einfelds, and the fast second movement is surrounded by two slow ones. The monogram E-F-E-D-E (with some added pitches) appears as a hidden melodic line in the piano figuration at the beginning of each triplet. Here we can see a reference to a tradition from the baroque age, when composers sometimes included their melodic material, also B-A-C-H, in the hidden polyphony. The combination of the monogram with the tritone is evident when we take into account another line of the texture. Namely, the pitch H is repeated in the piano left hand figuration, at the end of the each triplet, and it forms an augmented fourth against the pitch F that is the melodic pique of the monogram (Ex. 4).

The improvement of the monogram E-F-[E]-D-E with the tritone reflects a great importance of this interval in the melodics

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Example 4. Maija Einfelds, Sonata-Meditation: the beginning of the second movement

<sup>2</sup> Pitch H – here and further B natural according to the American Standard Pitch Notation.

<sup>3</sup> See more about it in: Carpenter 1995: 93, 95–96, et al.

by Einfeld. She admits that she discovered the possibilities of the tritone already at a young age, thanks to the War Requiem by Benjamin Britten (1961/62). During study years<sup>4</sup> it was her favorite composition, and Einfeld was especially fascinated by the varied interpretations of this interval in the melody and harmony of the Requiem. The use of the tritone in the combination with the monogram also changes character of the latter; it sounds shriller and in this respect is moving closer to the degree of expressiveness of B-A-C-H or D-Es-C-H rather than a simple E-F-[E]-D-E.

### 2.3. Verticalisation of the monogram

Another important group of changes in the monogram by Einfeld is connected with its verticalisation. This trait particularly clearly reflects a close interaction and even convergence between harmony and melody which is a significant aspect of contemporary music. It may be noted that Shostakovich, whose style was an important source of inspiration for the early Einfeld, used the monogram D-Es-C-H mostly horizontally, as a melody, although there are also exceptions, such as his String Quartet No. 6 (1956): each movement of this work is closed by a verticalised D-Es-C-H which appears in various harmonic contexts. In turn, for Maija Einfeld the verticalisation of the melody is not an exception, but rather a characteristic feature and some typical models could be differentiated.

Firstly, a contrapuntal combination of almost the entire monogram in a certain instrumental or vocal part with monotonous repetitions of its microstructure could be mentioned here – the minor second E-F being in another one. Thereby Einfeld highlights the funeral semantic that is historically connected with a descending intonation of a minor second and can very frequently be found in her works. An example is the lyrical and quiet final phase from the chamber oratory *At the Edge of the Earth...* (*Pie zemes tālās...*) for mixed choir (1996). The monogram E-F-E-D-E is performed by the first soprano, and the minor second F-E is repeated by the second alto. Other choral parts contain different material; therefore, the general mood of the music acquires a particular ambiguity (Ex. 5).

Example 5. Maija Einfeld, *At the Edge of the Earth...*: movement 4, mm. 107–114 (see the pitches of the monogram in the parts of soprano 1 and alto 2)

<sup>4</sup> Einfeld has graduated from the Jāzeps Vītols Latvian State Conservatory (nowadays the Music Academy) 1966.

A partially similar verticalisation can be observed in the Third sonata for violin and piano (1990). The violin plays all pitches of the monogram, and the bass of the piano part includes an interval of sad character – a minor third D-F which is also derived from the monogram and is performed as a sustained ostinato. The funeral semantic that is so important for Einfelds is also strongly expressed here. The middle lines of the texture contain other pitches, as well.

In the Concerto for viola and chamber orchestra (2011) the monogram is used both at the beginning and end of the work, and it reminds of a certain art of a signature. A similarity to its interpretation in the previous examples can be observed in the conclusion of the Concerto. The pitches of the monogram are included in two trembral lines: namely, the double basses play only the minor third D-F, and the violas repeat the sad minor second E-F. The sustained pedal point E is also used in the parts of the first violins, and thereby the importance of this pitch as the basis of the monogram is highlighted (Ex. 6).

Example 6. Maija Einfelds, Concerto for viola and chamber orchestra: the ending (see the pitches of the monogram in the parts of violins 1, violas and double basses)

Another model of verticalisation is the distribution of three pitches of the monogram – E, F and D – between three textural lines so that each of these pitches is monotonously repeated, and therefore obtains an expression that is similar to incantations. Such art of the monogram by Einfelds is found in compositions that have been inspired by folklore, for example, in her choral work *May Ballad* (*Maija balāde*, 1997) which is based on the poem by Aspazija; the topic is a witches' Sabbath. The mood of pagan mysticism is also achieved with a specific use of the monogram: in the measures 121–125 its pitches are monotonously repeated in the parts of the second soprano, the second alto, both tenor parts and the first basso (Ex. 7).

Example 7. Maija Einfelds, *May Ballad*: mm. 121–125

It may be noted that magical motifs have always attracted Einfelds both in archaic Latvian and oriental cultures. It follows from this quote:

“I test everything with my voice! I listened to the recordings of shamans. They were from Tuva and the Himalayas. The melodic material is very simple, but what’s odd is the creation of the sound as the howling of the wind or wolves. ... It is something unbelievably beautiful. ... And these old times – it is so fascinating!” (Aperāne 2000)

An archaic nuance of the monogram can also be observed in the organ piece *From Antiquity* (*Iz senseņiem laikiem*, 1992). The pitches of the monogram are repeated monotonously in different lines of the texture at the beginning of the work, and thereby introduce the listener to the tranquil mood of the composition. The very gradual increase and decrease of the number of pitches highlights a static character of the music (Ex. 8), and this feature is also characteristic for the archaic form-building.

Example 8. Maija Einfelds, *From Antiquity*: the beginning

### 3. Concluding remarks

Analysis of the use of the monogram in the music by Maija Einfelds suggests some significant conclusions:

- Although the monogram E-F-[E]-D-E itself does not have as dramatic expression as B-A-C-H or D-Es-C-H, this melodic sign is used by the composer only in works of serious and frequently also tragic content<sup>5</sup>. This feature corresponds to the general mood of her music that was rightly described by the philosopher Ilmārs Šlāpīns in his interview with Einfelds under the title *Sisyphus is starting from scratch* (*Sīzīfā sāk no nulles*: Einfelds 2003). The composer has achieved the dramatic character of her monogram in different ways, such as the registral dispersing of the pitches, the adding of the tritone intonation, etc.
- Out of the two aforementioned arts of monogram described by the musicologist Juferofa (2013) – the exoteric (open) and the esoteric (partially hidden) – more characteristic for Einfelds is the second model. The monogram by Einfelds frequently appears only as a fleeting vision and even if it is structurally enclosed from the previous musical material it soon freely and smoothly emerges with the following one, or vice versa. This esoteric interpretation reflects spontaneity as a characteristic feature of the musical form-building by Einfelds because the changes of the musical material in her works are frequently flowing.
- The arts of interpretation of a monogram in the music by Einfelds reflect both the succession to classical traditions and the contemporary approach. The relationship to classical traditions is expressed in the addition of other pitches to the monogram. The contemporary approach is particularly clearly seen in different arts of the verticalisation of the melody of monogram and also in the registral dispersions of the pitches (e.g., its use in two versions, with a cantilena of seconds and with shrill soundings of septims or ninths) so that it occasionally loses its melodic character<sup>6</sup>.

<sup>5</sup> It is not found in her very few humorous works, such as *White Buck Swimming by the Sea* (*Balts buķelis peld pa jūru*, 2003) for a choral group, a.o.

<sup>6</sup> As another outstanding example of this art of interpretation of monogram could be mentioned the Canon in Memory of Igor Stravinsky by Alfred Schnittke (1971). This work is created as variations for string quartet, and includes very different registral versions of the monogram by Stravinsky (the monogram was created from some letters in the name, patronym and family of the composer: IGor FEDorowitSCH StrAvin.Sky).

The study could be helpful for further comparative analysis of the monograms by Einfelds and other composers. This topic deserves research in depth because it would allow us to better understand both the history of musical monograms and some possibilities of melodic expression in contemporary music in general.

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### Kai kurie monogramos melodinės interpretacijos tipai: Maijos Einfelds monogramos (E-F-[E]-D-E) atvejo analizė

#### Santrauka

Muzikinių monogramų pomėgis dažnai signalizuoja kompozitoriaus polinkį į dramatinę ir filosofinę raišką, subtekstus, kuriuos reikia iššifruoti. Pažymėtina, kad žymius skirtingų laikotarpių kompozitorius, pamėgusius monogramas, sieja tam tikri stilistiniai panašumai. Užtenka paminėti Johanno Sebastiano Bacho muzikos įtaką Dmitrijui Šostakovičiui. Tuo tarpu latvių šiuolaikinės muzikos kūrėja Maija Einfelds (g. 1939) pripažįsta, kad D. Šostakovičiaus muzika padarė didelę įtaką jos ankstyviesiems kūriniams.

Monograma E-F-[E]-D-E M. Einfelds muzikoje yra dažnai naudojamas ir didelį prasminį krūvį turintis ženklas. Nors ši melodinė formulė neturi tokio individualizuoto skambesio kaip B-A-C-H ar D-Es-C-H, tačiau Einfelds kūrinuose ji labai išraiškinga, nes pasirodo įdomiuose melodiniuose kontekstuose.

Straipsnio tikslas – plačiau panagrinėti šiuos kontekstus, atkreipiant dėmesį į tokius monogramos išraiškumą sustiprinančius aspektus, kaip kad registrinio išdėstymo įvairovė, sąveika su kitais melodiniais elementais ir faktūrinis kontekstas.

Šiuo tyrimu siekiama giliau pažinti Maijos Einfelds muzikos stilių, taip pat pateikti naujų įžvalgų apie bendresnes monogramų – įvairių kompozitorių kūryboje naudojamų melodinių ženklų – interpretacijos tendencijas.

**Reikšminiai žodžiai:** monograma kaip melodinis ženklas, Maija Einfelds, registrinis išdėstymas, sąveika su kitais garsų aukščiais, vertikalizacija.

## Linear Composing Strategies in Arrangements of Lithuanian Traditional Songs by Mikalojus K. Čiurlionis

### Annotation

The arrangements of traditional Lithuanian songs for choirs and piano solo by M. K. Čiurlionis (1875–1911) constitute socially and didactically important part of the composer's legacy. Meeting the needs of the national movement at the beginning of the 20th century they played an important role showing the composer's strong will to take an active part in the political revival of Lithuania, contributing to the development of professional arts and musical culture. Apart of the historically important social functions the arrangements of traditional songs are an interesting research object representing the innovative composing strategies of the composer. Over sixty traditional songs arranged for mixed and men's choirs and forty compositions for piano solo are known. Both could be treated as presenting a synthesis of traditional tunes with different composing ideas and developing principles. The topic of Čiurlionis' relations to traditional music is well researched (see Čiurlionytė 1959: 79–86; Landsbergis 1986: 45–48; Landsbergis 2004: 416–417; Astrauskas 2005: 43–49). The composer's compositional ideas, which are the main focus of the research were partly approached by Vytautas Landsbergis (Landsbergis 1986: 156–157), Rimantas Janeliauskas (Janeliauskas 2008: 50–55), Gražina Daunoravičienė (Daunoravičienė 2012: 26), Rokas Zubovas (Zubovas 2011: 15–17).

The aim of the research is to turn attention to various techniques and strategies of tunes arrangement and to present a draft typology of the linear composing ideas. The methodological approach is based on the musical analysis of the composer's works.

**Keywords:** linearity, linear composing strategies, techniques, Lithuanian traditional music arrangements, M. K. Čiurlionis music, 20 century musical innovations.

### Historical background

Having interest in traditional songs from his first attempts of composing M. K. Čiurlionis formed a long lasting romantic engagement and tradition of folk tunes arrangement which started in the beginning of the 19th century. Soon after the first Lithuanian folk songs with tunes collections by Liudvikas Rėza, Simonas Stanevičius, Georg Ferdinand Heinrich Nesselmann, later by Christian Bartsch were printed, the first attempts to harmonize and adapt them to stage appeared. F. V. Rauschning, Andreas Peter Berggreen, Oskar Kolberg, Luis Nast were the first authors. Unfortunately, their harmonisations did not gain popularity and support from the cultured part of society. Some of them (e.g. O. Kolberg, L. Nast) were heavily criticised by their contemporaries for distorting the organic nature of the tunes (see Chomiński 1978: 199).

The growing Lithuanian choral movement and lack of an available repertoire gave a new impact to this interest at the end of 19th century. At this time Vincas Kudirka was one of the first to foster arrangements of Lithuanian traditional songs. He could not find a Lithuanian composer in his neighbourhood so he approached famous Polish musicians Władysław Rzepko, Aleksander Poliński, Stanisław Niedzelski, Piotr Maszyński, Michał Biernacki for help. They completed a set of folk song harmonisations published in a book "Kanklės" (the first volume came out in 1895, the second in 1899), but none of them became popular, mainly because foreign musicians could not feel the soul of Lithuanian songs, they used means inadequate to song tunes that distorted them. Feeling the lack of Lithuanian character in music M. K. Čiurlionis later reharmonized a few songs from Kudirka's collection. Paradoxically, singers mostly loved the songs simply harmonized with parallel thirds and basic chords by Kudirka himself such as "Kur upelis teka" (Where the stream flows), "Sėjau rūtą" (I planted rue), "Ant kalno gluosnys" (Willow on the hill), "Šėriau žirgelį" (I fed my horse) and others. Kudirka put accompaniment as simple as possible avoiding chromaticisms and any significant movement in accompanying voices. At the beginning of the 20th century the same song repertoire and performing problems were also faced by Leonas Ereminas, Vilius Storosta-Vydūnas, Mikas Petrauskas and others. Player piano rolls by Kudirka and Mikas Petrauskas represent examples of the harmonized songs of that period.

Traditional songs harmonized by Čiurlionis from 1904 until 1908 when he lead Lithuanian choirs in Warsaw and Vilnius are significant in the context of his creative work of the period. In 1908 his songbook "Vyturėlis" was published and gained popularity among singers. Čiurlionis approached each folk song time individually trying to convey its specific mood and emotion. The only principle he strictly adhered to was to keep the tune unchanged from the beginning to the end of the composition exposing a dozen of different ways of various harmonic and polyphonic techniques as accompaniment. The development of tune using harmonic or vertical means and compositional techniques was a common practice of that time, meanwhile linear or polyphonic means had never been used before. Even in the harmonic sphere, the composer did not limit himself to the

main functional chords, and widely used chromatics, dissonances, modulations. The well-known arrangement of the traditional song “Šėriau žirgelė” is based on modulation from E $\flat$  major to c minor.

**Šėriau žirgelė**

VL 292 (1906?)

*Sostenuto e poco lugubre* *più risoluto e mosso*

Example 1. M. K. Čiurlionis. Arrangement of the traditional song “Šėriau žirgelė”

On the one hand, Čiurlionis harmonisations are close to chamber music, they are not easy to perform and all that puts limitations to their popularity. On the other hand, they play an important role in the development of the artistic emotions and professional artistry of the performers. In harmonisations of such songs as “Oh grove, grove”, “When dawn breaks” and others the composer found organic synthesis of the melody and the leading voices, and by using accompaniment revealed the emotional content and structure of the tune. These compositions still constitute the golden part of the repertoire of many choirs.

The most interesting part of the songs are those where linear composing strategies prevail. I will to present examples with contrapuntal mixture of the linear material of different structures (e.g. diatonic and chromatic, diatonic with artificial modes, polytonal, serial etc.) leading to vanguard modernistic sounding.

### Polyphonic means

Arrangements of traditional tunes by Čiurlionis stand over contemporary ones by their polyphonic texture, which could be found in nearly each composition. By using polyphonic means Čiurlionis achieves many-faced coloristic sounding and concentrates a few different ideas in one timely restricted form. His polyphonic means are extremely large: the tune is treated either as a theme for fugue or fugetta, it can be echoed by imitation or inversion, supplemented by vertical and horizontal counterpoints, bourdon, ostinato, combined with diatonic and chromatic lines. Provided examples illustrates diachronic development of composer’s ideas. Ex. 2 represents the composer’s first attempt of to “domesticate” folk songs. According to Vytautas Landsbergis, Juozas Žilevičius in his memoirs wrote that Čiurlionis played this joyful song to his patron Mykolas Oginskis in 1894 (Landsbergis 2004: 420).

**Ant kalno gluosnys**

VL 289 (?-1906)

*Con moto*

Example 2. Basso ostinato “Ant kalno gluosnys”, VL 289 (1906? 1894?)

Following two examples (3a and 3b) illustrate the techniques of vertical counterpoint used in arrangement of the traditional song “Ei, mergele, kur buvai?” (Oh, my girl, where have you been?).

Ei, mergele, kur buvai?

I

VI. 283 (1906?)

Lento ma non troppo

II

Lento simile

Example 3 (a, b). Vertical counterpoint “Ei, mergele, kur buvai?”, VL 283 (1906) I, II variations

### Rhythmical means

In his early period Čiurlionis often used various rhythmic means giving priority to patterns shared from traditional Polish dances – polonaise, mazurka, motor rhythmic, in the later period – ostinato and izorhythmic. Some of the Lithuanian songs in this period were treated as Polish. In one of the first documented arrangements, for example, the song “Sėjau rūtą” we could trace izorhythmic bass, based on the polonaise rhythm scheme. Later on the composer returned to this song and its sounding became sophisticated and tritonal in 1909. When Čiurlionis got acquainted closer with Lithuanian traditional tunes, he was amazed at their rhythmic monotony, admired as one of the most precious features, giving to music a profound and noble sounding. A similar statement we find in his writings “On music” from 1909. Example 4 illustrates basso ostinato, which was the composer favourite principle of linear development.

Močiute, noriu miego

VI. 281 (1906)

Allegretto

Example 4. Basso ostinato “Močiute, noriu miego” (Grandmother, I want to sleep), VL 281 (1906)

### Linear modal and tonal means

Vertical sounding strategies in Čiurlionis works is a separate topic of our interest. Meanwhile polyphonic, confronting melodic lines of a different modal structure can be treated as a new innovative principle. Side by side with very common diatonic lines we face chromatic lines, a mixture of diatonic and artificial modal (octatonic) lines, sometimes ambivalent tonality or bitonality and polytonality. The latter are radical not only in Lithuania but also in international contexts. And what is important is that the composer choose compositional techniques that were derived organically from the inner structure of the melody. This innovative strategy was later developed by Julius Juzeliūnas in his work *On the question of the chord structure* (1972).

Example 5 illustrates the composer's attempt to enlarge possibilities of diatonics, including chromatic structures as separate lines. As an outcome of mixture, the sounding reaches extremely modern result.

Example 5. Chromatics in middle voices + diatonics in upper and bass lines "Išėjo mergaitė" (The girl went out), VL 278 (1906)

In Example 6 we can see another innovation – a narrow range lament tune "Motule mano" (My dear mother) is confronted with an artificial octatonic mode, which was also constructed like a lament from the same intervals of tone and semitone. The result of the mixture is unbelievable, the feeling of tonality disappears. The artificial modes at Čiurlionis' times were of interest to Aleksandr Skriabin, Nikolai Rimsky-Korsakov, Igor Stravinsky. Thus, looking for new ways to musical expression, Čiurlionis can be counted among the outstanding pioneers.

Example 6. Octatonics "Motule mano" (My dear mother) theme – Three preludes, VL 300 (1906)

Example 7 is also innovative, especially its middle part, where at the same time three tonalities sound – G major, e minor and c minor. This is an argument to prove that Čiurlionis was the first on the way, which was chosen lately by Igor Stravinsky and Béla Bartók, and in serial using all 12 tones, he is close to Arnold Schoenberg, Anton Webern and Alan Berg.

Example 7. Tritonality (G-e-c) "Sėjau rūtą", VL 334 (1909)

### Texture and structural means

Texture and structural means in arrangements of traditional tunes varies according to their address: for children's choirs it is close to folkloric analogues, however in dramatic works for piano they are thick and sophisticated. Čiurlionis kept the structure of the song unchanged but for development often uses a variation form, putting the variants of the same song to cycles of two to five parts. The development of traditional tunes is not typical of him but in the later period, he loved to develop short motives in a very dramatic sophisticated texture (Ex. 8).

IV. *Motule mano*      IV. *Oh, My Dear Mother*  
(Prelude) VL 340 (1909)

Agitato e con espressione

Example 8. Motivic development of the tune “Motule mano”, VL 340 (1909)

### Conclusions

- Traditional tunes were admired by Čiurlionis as an equivalent of nature in culture, as a treasure of natural feelings, a mirror of the national character, a means of national consolidation, and valuable material for professional works.

- Traditional songs harmonized by Čiurlionis merged into tradition lasting since the beginning of the 19th century. In his arrangements, the composer reached new horizons.

- Harmonisations for choir were created mainly for repertoire needs in Druskininkai in 1905 and 1906 but he kept a strong interest in traditional tunes all his creative life.

- Folk tunes arranged for piano were the composer's laboratory in search for new compositional techniques.

- Čiurlionis approached each tune individually and provided more than 20 different ways of arrangement and linear development of the melodies using polyphonic, modal, tonal, harmonic and textural means and combining them. Some of the strategies applying linear mixtures of diatonic and chromatic lines, artificial modes, bitonality and polytonal structures are modern and innovative.

- In the harmonisations of songs “When dawn breaks”, “Oh grove, grove” and others the composer found organic synthesis of various compositional means and revealed the mood and structure of the tune.

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## M. K. Čiurlionio lietuvių liaudies dainų išdailų linearinės komponavimo strategijos

## Santrauka

Liaudies dainų išdailos chorams *a cappella* ar fortepijonui solo sudaro visuomeniškai ir didaktiškai svarbų M. K. Čiurlionio (1875–1911) kūrybinio palikimo sandą. Inspiruotos nacionalinio atgimimo reikmių, jos rodo ryžtingą kompozitoriaus apsisprendimą aktyviai dirbti politinio Lietuvos atgimimo labui, kurti ir plėtoti nacionalinę muziką ir dailę. Šie kūriniai, be visuomeninės jų svarbos, yra ir vertingas tyrimo objektas, atskleidžiantis netradicines, neretai inovatyvias kompozitoriaus kūrybines strategijas. Kiekvienoje iš šešiasdešimties kompozitoriaus liaudies dainų aranžuotųjų vaikų, vyrų ar mišriems chorams bei keturiasdešimtyje išdailų fortepijonui matome tradicinių melodijų ir skirtingų komponavimo idėjų bei plėtojimo principų sintezę. Įdomiausias šių kompozicijų – tos, kuriose vyrauja linearinės muzikinės minties plėtotės strategijos. Išlaikydamas nekintamą liaudies dainos melodiją, kompozitorius kuria palydimuosius balsus pasitelkdamas dešimtis skirtingų polifoninių raiškos priemonių. Straipsnyje aptariamos M. K. Čiurlionio taikomos kontrapunkto priemonės, lineariškai sugretinančios skirtingos sandaros muzikines struktūras, – tai diatonika ir chromatika, diatonika ir dirbtinės dermės, politonalumas, garsų serijos ir kt.; jos kardinaliai keičia garsinę raišką, atveria kelią muzikos kalbos inovacijoms ir pozicionuoja M. K. Čiurlionį greta pačių ryškiausių XX a. pradžios muzikos novatorių.

## Specifics of Musical Genre and Melody in it

### Annotation

The object of the article is melody about the specifics of which we decide invoking different music genres. The goal of the study is to pay attention to the dependence of melody character on the genre. In this case, one speaks about the music of modern Lithuanian composer, Bronius Kutavičius (2009) that was used for the composition of a silent film of the Danish film director, Dreyer, called *The Passion of Joan of Arc* (1928) and, in other case, one has in mind the melody system, which is used in Kutavičius' independent work the *Epitaph to the Maid of Orleans* (2014).

In this case, the study content shows a direct dependence of the melody on the genre, distinguished according to the dependence and nature of the performance (e.g., when the melody is applied to the composition of a silent film and performing of an independent music work). The most significant result of the aforementioned comparison should be considered the issue of independence: music, written for a film, is dependent on the film itself (here music here is secondary). In a music work, melody is its exceptional and the most significant element.

**Keywords:** melody, composition, silent film sound, sound excerpts.

### Introduction

The term *melody* in film covers a wide study field, which is composed of the expression of the horizontal music tones. In this case, we speak about the musical elements of the tone pitch, rhythm, tonal colour, etc.

The object of film and its elements in it were investigated by different scholars, especially during last two decades of this century. Anyway, scholar Lucia Corres Sarria has written about the film theories since the 1970s. The melody elements there are treated as a part of structural semiotics.<sup>1</sup>

As Smilen Antonov Savov mentions, he “focuses his attention on some of the cinematic signs present in every film project . . . , and to illustrate how powerful and misleading is the usage of them.”<sup>2</sup>

Scholars Daiva Šidiškytė and Daiva Tamulaitienė also pay attention to different elements of the basis of specific narrative and promotional structures. One of it is musical elements and melody in it.<sup>3</sup>

The nature of the melody usually depends on its characteristic features and its relation with the composition in which it functions. Among the peculiar and exceptional melodies, one can mention the Gregorian Chorale and its intonations or the rhythmic of the waltz, polka, bolero, and others used as compound parts of the melody in the compositions of a bigger form.

We speak separately about the design of various music melodies and sound, used in the compositions of a greater form. Here one has in mind silent film and music melodies accompanying its images and specifying them; the relation of the so-called visual steps, i.e. depicted visual running and its corresponding music. The most characteristic feature of silent film and its accompanying music can be considered the synchronisation of visual and audio levels.

Sound illustrations of silent film were not always used fairly and ingeniously. The usage of the same music melodies and fragments in several films, as was mentioned by semiotician Zofia Lissa, is the greatest shortage.<sup>4</sup>

In a silent film, the role of melody is given to the other elements of the film, as was mentioned by Hamid Reza Shaeiri and Selma Nayebi.<sup>5</sup>

The attention in the article is given to the expression of the melody in the context of the film and separate music composition. The music of the Lithuanian composer, Bronius Kutavičius, created for the film about Joan of Arc, and his the *Epitaph to the Maid of Orleans* obviously shows the features, present in the composition told by the music.

<sup>1</sup> Sarria, Lucia Corres (2014). The (unresolved) debate between opposed film theories. Can a cognitive semiotics of film work as the common ground? *The Role of Humanities in Contemporary Society: Semiotics, Culture, Technologies*. 1st International Congress of Humanities (ICoN 2014). Program and Abstracts, p. 54.

<sup>2</sup> Savov, Smilen Antonov (2015). Cinema Signs: Archetypes and Metaphors. *Creativity. Diversity. Development*. 2nd International Congress of Humanities (ICoN 2015). Abstracts and Program. Kaunas, 25–29 May 2015, p. 131.

<sup>3</sup> Šidiškytė, Daiva, Tamulaitienė, Daiva (2014). The Analysis of Film Trailers from the Multimodal Perspective. *The Role of Humanities in Contemporary Society: Semiotics, Culture, Technologies*. 1st International Congress of Humanities (ICoN 2014). Program and Abstracts, p. 106.

<sup>4</sup> Lissa, Zofia (1964). *Estetyka Muzyki Filmowej*. PWM: Polskie Wydawnictwo Muzyczne, p. 116–123.

<sup>5</sup> Reza Shaeiri, Hamid, Nayebi, Selma (2015). Silence Representation Analysis in the Kieslowskian Cinema in the Framework of Tensive Function of Discourse. *Creativity. Diversity. Development*. 2nd International Congress of Humanities (ICoN 2015). Program and Abstracts. Kaunas, 25–29 May 2015. Kaunas: International Semiotics Institute, Kaunas University of Technology, p. 131.

### **The peculiarity of the music melody for the film *The Passion of Joan of Arc* (2009)**

The peculiarity of the melody in cinema is determined by its dependence on the film itself. A film, according to the composer Antanas Kučinskas, is first of all watched and only then listened<sup>6</sup>. The music for Dreyer's film *The Passion of Joan of Arc* is not independent as it is formed with reference to its visual level, i.e. music serves the film.

Besides, music for this silent film acts a dual role of the melodies: illustrating and supplementing film. In addition, the most important elements, which, according to Kutavičius, have *connected* the film material with its accompanying music, were the image, tempo and dynamics<sup>7</sup>.

The composer Kutavičius in this film was influenced, according to him, by a dramatic expression of Joan of Arc which is demonstrated in the film. The power of suffering, her emotions are expressed by the actress Maria Falconetti (1892–1946) face in a close-up<sup>8</sup>.

The researcher Santa Lingevičiūtė has described the film as an avant-garde one because of the prevailing image fragmentation, space vacuum and missing time<sup>9</sup>.

One should mention the characteristic features to the film melody design in this work, among which the most characteristic can be considered the marked time, corresponding one or another image episode in the precision of seconds.

The most characteristic feature of the mentioned film is its role of accompanying-supporting the image. There prevails the repetition of the same sound or its long keeping. Separate beat times, which are composed in this way, are often repeated. In the film music, the mentioned repetitions of music formations prevail, while the dynamic scale stays neutral.

The mentioned music illustrating Dreyer's film, according to the conductor and musicologist Donatas Katkus, is real music of Kutavičius<sup>10</sup>.

Besides the specially created music for a silent film by Kutavičius, the quotations of his earlier compositions *Epitaphium temporum pereunti* (Epitaph to the Passing Time, 1998) and the stage diptych *Ignis et fides* (2001–2003) were used and in the finale together with the orchestra the psalm "Blackbirds in a snowfield" (translated by Sigitas Geda) is performed by a choir from the psalm diptych by Hildegard von Bingen.

### **Film Music by Kutavičius**

Music by Kutavičius that sounds at the beginning is instantly recognised. There is a six-bar motif, which is performed by the cantor and a group of instrumentalists. It means that a new group is added to those playing music, repeating the same motifs belonging to them. Thus, eight groups gather playing music in a similar way.

We consider an exceptional episode in which the cantor sings, performing the motif of aleatoric technique (every group of the string instruments is supported here by a separate cantor). It is characteristic of the precise marking of sound volume and the lack of sound length marking.

Another case of the illustration of communication in music is the episode in which we can see the roles of listening and responding can be considered. With the questions of the investigators of Joan of Arc we relate the rising intonations performed by cellos and contrabass with a wide one and a half octave range crotchet notes. In the lower register *staccato* sounds are as if emphatically "hardened", and in the upper register they are prominent with separate sounds, which are performed in half *marcato*. In such musical language culmination, on the same note *fortissimo* and *diminuendo* there are (crotchet and semibreve note long) sounds.

To the silent responses of Joan of Arc (piano) we attribute the parts of violas and violins in which one can hear a famous and very rapid (twenty crotchets long) sound falling as a sigh in second interval and prolonged half-length notes with a point and their termination.

We have an opposition of all the orchestra and the violins there. In such way, i.e. with the help of music, the wish was to emphasize that the church was against the young Joan of Arc who struggled for the independence of her country.

In this case, one can say that as though music sounds speak for the characters.

<sup>6</sup> Kučinskas, Antanas (2011). *Theatre and cinema music. Theoretical material context*. Vilnius: Kronta, p. 13.

<sup>7</sup> Kutavičius, Bronius. How does The Passion of Joan of Arc sound? *Respublika* 2009-10-29. Among the performers of the film music, the composer has mentioned the following ones: vocalist/cantor, bells, organs, I violin, II violins, alts, cellos, contrabass, percussion instruments, record tape (cantor, campanelli, organe, violini I, violini II, viole, violoncelli, contrabassi, percussion, the tape).

<sup>8</sup> Kutavičius, *ibid.*

<sup>9</sup> Lingevičiūtė, Santa (2009). How does The Passion of Joan of Arc sound? *Respublika* 2009-10-29.

<sup>10</sup> Katkus, *ibid.*

Among the neologisms of the composer Kutavičius one can mention the correspondence of Morse code in music<sup>11</sup>. Strongly press the forefinger to the cord. You get an uneven small rhythmical drawing, similar to Morse code, as was mentioned by the composer.

In the finale of the film about Joan of Arc, as was mentioned by Kutavičius, there sounds the music from the earlier mentioned works, thus the emotional weight of the film would be transferred into music (from the image level to the audio level).

The so-called image and sound convergence were considered by the composer conditionally. The latter ones gain a public character – as if merging with the mourning universe. The music of this silent film, at the same time, as if imitates an audio design, i.e. noise.

### *Epitaph to the Maid of Orleans (2014)*

In the score of the music by Kutavičius created for Dreyer's film *The Passion of Joan of the Arc*, one can see how much it differs from his *Epitaph to the Maid of Orleans*.

In the case of the film, one should mention the music's independence (also of the melody in it as well) on the film itself to which it was written. Music here is secondary, i.e. dependent on the continuous image development which is measured in seconds. In the independent music work, a final music form prevails (its main measurement unit is written in beating times).

The *Epitaph to the Maid of Orleans*, according to the composer, is pure music<sup>12</sup>. Kutavičius has used this term for the so-called academic music work. It can be treated as an independent instrumental play for symphony orchestra. According to the changing tempo and predominant instruments or topics, we can determine the features of the work form and structure. The mentioned changes of the tempo tell about the separate scales of the form composition. In the beginning, when there dominate the topics of the work, a constant tempo prevails, in the culmination, it reaches the maximum, and in the end of the composition, it gets calmer and moves to a very slow tempo.

From the beginning it can be seen how musical material is divided into the blocks of 1–6 bar motifs, which are repeated for many times. It is a powerful and periodical “growth” of dynamics during which one gradually goes from a *ppp* chosen episode in the beginning towards a *fff* episode in the end of it. In every of the aforementioned groups, the cantors prevail, accompanying different groups of the stringed instruments. Besides, thus gradually one increases the group of wooden wind instruments (flutes, hautboy, clarinets, fagots), accompanied by contrabasses. The composer's style is characteristic of the same motif repetition, during which the number of its performers and dynamics are increased gradually<sup>13</sup>.

In the middle scale of the *Epitaph*, the orchestra is strengthened by supportive percussion instruments in solo by turns. Among those instruments, the percussive piatto solo, tambour solo, triangolo solo and Temple blocs. One should mention the prevailing topic<sup>14</sup>.



B. Kutavičius. *Epitaph to the Maid of Orleans*

In the aforementioned middle part of the mentioned *Epitaph*, the scene of investigation is as if recovered from the film *The Passion of Joan of Arc*, in which we see Joan of Arc and her torturers as well as the representatives of the church. Then, in turns, the emphasized opposition between the stringed (a) and percussive (b) instruments sounds (the episode is given the musical form *ababa1*). In the part of the stringed instruments, the intonations of the seconds reminding of Joan's sighs sound. In the parties of the percussive instruments (often of the whole orchestra as well) the intonations of the question which can be related to the representatives of the church who tortured Joan of Arc prevail. The inquiry is symbolically ended in a pause of the eighth note and general pause of the whole orchestra.

<sup>11</sup> Kutavičius, Music for the film *Joan of Arc*, the score, p. 37.

<sup>12</sup> Kutavičius, “Festival from a close look: from whispers to rages”, *Kauno diena*, 08.11.2014.

<sup>13</sup> Gradual increasing and gradual decreasing of loudness, the number of instruments, and the same motif repetition are typical features of Kutavičius' music.

<sup>14</sup> Kutavičius, *Epitaph*, p. 13 in the score: ob. 1: mi-re-fa-sol-mi, etc., 3 beat times.

The final part of this episode can be related to the point of the organs entrenched in the part of the contrabasses and its accompanying gradual decreasing of loudness (from *ff* to *pp*). In its background, the cantor sings the melody of the Gregorian choral *Ex audi, Domine, justitiam meam...* via the text (a phonogram record is used).

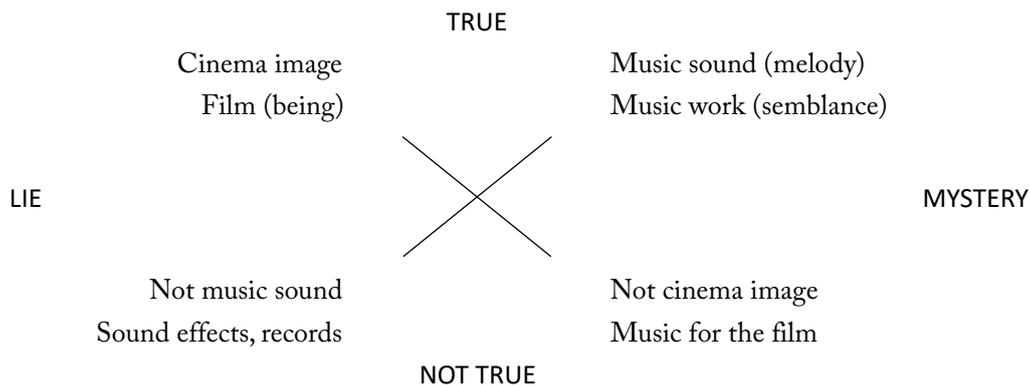
The author's comment of this investigation scene – the voice, as if going away and melting in the space – should be considered a further episode performed by the orchestra, during which it slowly moves in semitones higher until loudness gradually decreases.

The *Epitaph to the Maid of Orleans* ends with recorded church bells. Their quartet is comprised of the repeated crotchets, eights, triplets and the “pawnshop” (one eighth and two sixteenths) rhythmic bells. They are supported by the string instruments slowly playing *ppp*.

### Final part

Two different compositions of the composer Bronius Kutavičius in the sense of genre, used for comparison, allow speaking about a different level of their melodies. Here one speaks about the music created by the aforementioned composer for the silent Dreyer's film *The Passion of Joan of Arc* and his composition the *Epitaph to the Maid of Orleans* (2014). In this case, the music composed to illustrate the film and individually created music composition are compared.

In the first case, music in cinema is given the secondary role as in films the image prevails. On the contrary, in a music work, the music sound prevails, which can be described as melody in a wide sense. Among the aforementioned music expression in these compositions the oppositional relations emerge, which are rendered using the semiotic square of A. J. Greimas (*Carré sémiotique*):



With the help of articulation of the semiotic square, we render the so-called Greimas's *véridiction* topics of emerging here and his “delineated category of being and semblance”. One can obviously see the established oppositional relations between image (film) and sound (music–melody). This expression can be related to the modalities, evaluated with categories REAL vs NOT REAL and the pair of the opposition IMAGE vs SOUND. Modality category of NOT REAL matches the expression of the opposition Not music sound vs Not image. Not music sound category is its sound records and sound effects close to music, for instance, in the *Epitaph* the insertions of the Gregorian chorales or bells supplementing the work from the records. Analogous to the latter ones can be the music for a silent film, which is respectively (theoretically) considered the opposition Not film image (it is equal to the expression Music (melody) film).

Thanks to the semiotic square of Algirdas J. Greimas, it was possible to reveal the peculiarities and differences of the expression of the aforementioned compositions.

### Conclusions

- The nature of music (melody) is directly dependent on the composition genre to which it belongs.
- Music (melody) serving for the silent film is a secondary and dependent product.
- Music work is the formation of independent structure and unique content.

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## Muzikos žanro specifika ir melodijos vaidmuo

### Santrauka

Kalbėdami apie melodijos fenomeną muzikoje, nukrypstame į šiais laikais aktualią žanro temą. Nuo žanro priklauso jo įtakos zonoje esančių melodijų pobūdis. Šiuos žodžius patvirtina straipsnio objektas – du skirtingų žanrų kompozitoriaus Broniaus Kutavičiaus kūriniai, pagrįsti ta pačia istorija apie kovingą prancūzų didvyrę Žaną d’Ark. Vienu atveju kalbame apie minėto kompozitoriaus parašytą muziką nebylijam danų režisieriaus Carlo Theodoro Dreyerio filmui *Žanos d’Ark aistra* ir Kutavičiaus sukurtą muzikos kompoziciją *Epitafija Orleano Mergelei*.

Kino filmui *Žanos d’Ark aistra* sukurta muzika yra antrinis darinys, nes ši muzika yra priklausoma nuo kino filmo, kuriam ji buvo parašyta. Muzika seka paskui vaizdą ekrane ir jį palaiko, nes begarsiam kino filme panaudota melodija yra vienas iš garsinio vaizdo fono elementų. Čia funkcionuojantys melodijai būdingi garsų pasikartojimai arba jų tęsimas, vienodoka dinamika ir pan. Svarbiausiu jos bruožu laikomas tarnavimas vaizdui.

*Epitafija Orleano Mergelei* kompozitoriaus vadinama grynąja muzika, t. y. charakteringa akademinės muzikos kompozicija, kurios melodija yra viena iš svarbiausių jos funkcionavimo priemonių. Šį kūrinį galima traktuoti kaip savarankišką instrumentinę pjesę simfoniniam orkestrui. Šioje kompozicijoje jos melodijos atlieka daug funkcijų: skiriamąją, plėtotės, formos konstravimo. Pagal šiuos bruožus buvo sudaryta vienadalė *Epitafijos Orleano Mergelei* formos struktūra.

Opoziciniiais laikytini objektai – muzika kino filmui *Žanos d’Ark aistra* ir *Epitafija Orleano Mergelei* – straipsnyje nagrinėjami taikant A. J. Greimo semiotinį kvadratą (*carré sémiotique*).

## The Melodic Construction of *Pero Vaz de Sequeira*, a Historical Music-Drama in Ten Cantos and Three Epistles

### Annotation

This analytical essay is one of the subprojects of *Pero Vaz de Sequeira*, an opera commemorating the Quincentenary of Portugal-Thailand Diplomatic Relations (1511–2011).

The purposes of this analysis were:

- 1) to examine the melodic construction of the opera and its compositional styles;
- 2) to analyze and identify its musical systems such as the leitmotifs and motivic structures and other compositional techniques.

The results are the categorization of the leitmotifs into three groups: 1) Siam, 2) Portugal and 3) Symbolic Gestures. The motivic structures are categorized into three systems: 1) Tonal, 2) Multitonal and 3) Atonal. Each system is also grouped into types according to their styles. For the Tonal System, there are 25 motivic structures grouped into six types: a) Ordinary, b) Baroque, c) Siamese, d) Portuguese, e) Arabic, and f) Derivative. For the Multitonicity System, there are 19 motivic structures, also grouped into six types: a) Ordinary, b) Siamese, c) Portuguese, d) Minimal, e) Major-minor, and f) Derivative. For the Atonal System, there are only six motivic structures in only one type.

**Keywords:** operatic composition, Luso-Thai opera, Thai history 1684.

### Introduction

The opera *Pero Vaz de Sequeira* is a project commemorating the Quincentenary of Portugal-Thailand Diplomatic Relations (1511–2011). It is dedicated to the Duke of Bragança HRH Dom Duarte Pio, the project's honorary patron. The musical score was published in its entirety in 2011 and was presented to the Portuguese Embassy in Bangkok for the Quincentenary celebration in Portugal in 2012. The composer conducted a documentary research, in order to construct synopsis, libretto and character portrayal. It was presented at the World Conference on Education Sciences held at Sapienza University of Rome, Italy, in February 2013 (Srikananda 2011: 270–278). The musical score and the documentary research have been used as composition and research methods in graduate-level composition class at Kasetsart University's music department since 2014.

The synopsis is drawn from many contemporary accounts of the French and the later Siamese chronicles. The main source, however, was from the recently found reports of the mission itself to the Portuguese Viceroy of India. This account gave us a new insight that is very different from the widely available French documents especially the role of Dona Maria and Ok-pra Petracha. The libretto, also compiled from the same resources by the composer, is written in a free verse form.

The story of Dom Pero Vaz de Sequeira's embassy to Siam in 1684 is one of the most fascinating diplomatic maneuvers ever taken on the Siamese soil. Despite its recent public resurgence in parallel to the Quincentennial celebration, it remains relatively unknown outside the circle of Thai-Portuguese scholars (Seabra 2005: 10).

In 1684, Dom Pero Vaz was appointed ambassador to the Courts of Siam and Cambodia. Initially, he was to reaffirm the diplomatic relationship with the Siamese especially for the privileges already granted to the Portuguese residents there since the time of King Naresuan the Great. He was also secretly instructed by the Viceroy to gather information regarding the French activities in Southeast Asia. When the embassy arrived in Siam, they had to overcome many obstacles in order to accomplish their missions. Through information received from Dona Maria, Dom Pero found that the ambitious scheme of her husband, the Greek adventurer Constantine Phaulkon – King Narai's favorite – would lead to the complete takeover by the French and thus the end of everything including trade and the ancient friendship between Portugal and Siam. Dom Pero tried to persuade King Narai on many occasions to expel the French but to no avail as the King was such a progressive monarch and wished to open his Kingdom to the world. However, the King promised that he would not let any foreigners to interfere with the Portuguese in Siam.

At the same time, a Siamese noble Ok-pra Petracha was aware of the French intentions and was willing to take actions in order to protect the King and the Kingdom. This Ok-pra was to be elevated to the Siamese Throne after the demise of King Narai and expelled the French with the help of Dom Pero in secret.

Although Ok-pra Petracha, Dona Maria and Dom Pero had different motives, no one can deny the fact that each of them did a significant part in order to preserve the independence of the Siamese. More than 300 years passed by, one is remembered as a usurper, the other one a cook and slave, and the last one almost disappears from history all together. The composer would like to dedicate this music-drama in their memories. They are truly the unsung heroes.

## 1. The Musical Structure

The opera is divided into two parts. Each part contains five cantos or scenes. There are also three “epistle” scenes, each at the beginning, in the middle between the two parts, and at the end. They serve as monologues in the form of “letter reading” being recited by the Pero Vaz character, and accompanied by the Baroque (or Mock-Baroque) music, reflecting the period of when the story took place.

Each of the three epistles is accompanied by a prelude, an interlude, and a postlude respectively. Each of them contains the “water” motive as each epistle scenes occur on a ship. The prelude contains the original water motive. The interlude contains the Siamese version of the motive while the postlude contains the retrograde version.

## 2. The Musical Language and Compositional Techniques

The music of *Pero Vaz* includes systems of leitmotifs and motivic structure. They function similarly to the compositional techniques employed by Richard Wagner in his music-dramas. However in *Pero Vaz*, the leitmotifs and the thematic music function differently from one another. The analytical models are employed using techniques found in “A Guide to Musical Analysis” (Cook 1992), “Materials and Structure of Music” (Christ 1966), and “The Structure of Atonal Music” (Forte 1977).

The leitmotifs only serve as reminders to the audience of a certain main idea or cause that complements the action and are often interwoven into the singing lines such as the musical imprints of the two states of Siam and Portugal or the symbolic actions of the embassy’s prime mission and the treaty affirmation.

The motivic structure, on the other hand, only functions as the vehicle of the storyline at that particular moment, thus evoking certain sonic image, environment or atmosphere at the moment. Some are associated with the cultures portrayed in the story such as the Siamese *Pipaat*, the Portuguese *Fandango* and the Arabic presence when referring to Malacca. Some serve as a historical link to the music of the period (17th century Baroque music) and the Siamese ritual chant. Some serve as atmospheric development (musical soundtracks) such as “water”, “nature” and “inside the palace” motives. Some only functions to compliment certain actions or feelings such as mysterious, anger, proclamation, surprise, sacrifice, heroic deeds and celebration.

### 2.1. Leitmotifs

There are six leitmotifs, which can be subdivided into three pairs. The first pair is associated with the origin of the embassy – Portugal. The second pair is associated with the place where the story is taken – Siam; and the last pair is symbolic gestures namely the “motive of the mission” and the “treaty affirmation”.

#### 2.1.1. The “Siam” leitmotifs derived from the two Royal Anthems of Siam

The first anthem is an ancient anthem traditionally performed in the presence of the king on the throne by Brahmins the *Sankha* (conchs), the *Trae Lāngpōng* (Hindu trumpets) and the *Ban-dau* (a type of Hindu drum).



Figure 1. The ancient Siamese Royal Anthem

This leitmotif usually appears along with other musical material being played at the same time and only partially. It appears where there is a reference to the King of Siam. The anthem itself can be found in Canto 7 when the embassy is formally presented to King Narai using the horns to imitate the *Sankha* and the cor anglais, alto saxophone and trombone to imitate the *Trae Lāngpōng*.

The second anthem is derived from the current Thai Royal Anthem where there are two parts taken:



Figure 2. Leitmotif (in 2 versions) derived from the current Thai Royal Anthem

It usually appears where there is a reference to the Siamese State. In contrast to the former, this anthem is never used in its entirety in the opera.

### 2.1.2. The “Portugal” leitmotifs derived from the two National Anthems of Portugal

The first anthem was also served as the Portuguese Royal Anthem, *Hino da Carta*, from 1834 until the proclamation of the First Portuguese Republic in 1911. Only the first few measures of the introduction section is being employed as leitmotif and is used where there is a reference to the King or the Prince Regent of Portugal.



Figure 3. Leitmotif derived from the Portuguese Royal Anthem

The second anthem, *A Portuguesa*, is the current National Anthem of Portugal. As applied to the former anthem above, only the first few measures of the introduction section are being employed as leitmotif and are used where there is a reference to the Portuguese State.



Figure 4. Leitmotif derived from the current National Anthem of Portugal

### 2.1.3. The “Symbolic Gesture” leitmotifs

The first leitmotif in this category is the “Mission”. It is derived from the first two measures of the Embassy’s Presentation (or the Imperial) Anthem of 1684, of which later on, André Cardinal Destouches, a young French musician who accompanied Simon de la Loubère’s mission to Siam in 1687, made famous as *Une chanson Siamoise* set to the Siamese lyrics and published in de la Loubère’s book, *Description du Royaume de Siam* in 1691.



Figure 5. The Embassy’s Presentation Anthem

This leitmotif usually appears along with other musical materials being played at the same time. It appears where there is a reference to the motive of the mission. The anthem itself can be found in Canto 7 when the embassy is formally presented to King Narai.

The second leitmotif in this category is the “Treaty”. In contrast to others being employed in this opera, this leitmotif has no derivative origin.



Figure 6. The “Treaty” leitmotif

It only appears four times and always accompanies other leitmotifs only where there is a reference to the affirmation of the treaty.

Although there are other short musical passages that behave similarly to the leitmotif, however they only serve as atmospheric or merely as sound effects and are interwoven into the fabric of the music itself and are not assigned as leitmotifs. These are, for example, the “sunrise” that occurs during the “water” music in the First Epistle, Constantine’s snobbish “entrance-exit” mock-anthem in Canto 5, or the “Time-ticking” and the “Siren” in Canto 9, all of which are parts of the larger schemes being employed.

## 2.2. Motivic Structures

The opera’s framework is built upon three musical systems: tonal, multitonal and atonal. While most of them relate to one another often borrowing many elements from the others, many of them also operate independently due to the function usage (such as the “water” and “nature”) of that particular part. Each of them appears several times throughout the opera.

### 2.2.1. Tonal System

The tonal system comprises nearly 40 percent of the opera. There are 25 tonal motives used, and are assigned Roman numerals according to the order of appearance. They are categorized into six groups according to their similarities: Ordinary, Baroque (or Mock Baroque), Siamese, Portuguese, Arabic and derivative.

**Ordinary tonality** is comprised of musical material that contains ordinary Western classical tonality with progressive chordal structures. Ten ordinary tonalities are used:

Table 1. Ordinary tonality

No.	Tonal No./Name	First appeared in
1	Tonal I: Introduction	First Epistle
2	Tonal III: Plea	Canto 1
3	Tonal VIII: Reply	Canto 3
4	Tonal IX: Resolution	Canto 3
5	Tonal X: Advice	Canto 3
6	Tonal XIII: I Remember	Canto 4
7	Tonal XIV: Petracha	Canto 5
8	Tonal XV: Surprise	Canto 5
9	Tonal XX: Proclamation	Canto 7
10	Tonal XXIV: Recitative	Canto 8

**Baroque tonality** comprises musical material that employs Baroque counterpoint or other Baroque music techniques such as the figure-bass and ornament usages. This technique is employed to reflect the time period of when the story took place (late 17th Century). There are only two Baroque or Mock Baroque tonalities used:

Table 2. Baroque tonality

No.	Tonal No./Name	First appeared in
1	Tonal II: Anticipation	First Epistle
2	Tonal XIX: Imperial Anthem	Canto 7

**Siamese tonality** comprises musical material that employs the Siamese or Thai tonality such as pentatonic or the use of the Mixolydian mode derived from contemporary Thai *Luk-tung* music. Some of them were developed from the Thai traditional music itself such as Tonal V and XXI while Tonal XVII is derived from the Ancient Royal Anthem itself. Six Siamese tonalities are used:

Table 3. Siamese tonality

No.	Tonal No./Name	First appeared in
1	Tonal IV: Siamese	Canto 2
2	Tonal V: Siamese Interlude	Canto 2
3	Tonal XVI: Siamese Water	Interlude
4	Tonal XVII: Siamese Ancient Royal Anthem	Canto 7
5	Tonal XVIII: Chant	Canto 7
6	Tonal XXI: Nature	Canto 8

**Portuguese tonality** is comprised of musical material that contains Portuguese elements such as ornamental usages from *Fado*. Two Portuguese tonalities are used:

Table 4. Portuguese tonality

No.	Tonal No./Name	First appeared in
1	Tonal VII: Portugal	Canto 2
2	Tonal XII: Portuguese Home	Canto 4

**Arabic tonality** is comprised of musical materials that employ the Arabic sound which is used in connection to the Islamic influence of the Malaysian city of Malacca, a former Portuguese colony. Although only one musical phrase is used, it is constantly presented (especially the augmented second interval) in the vocal parts whenever the “Arabic” feels are called upon:

Table 5. Arabic tonality

No.	Tonal No./Name	First appeared in
1	Tonal VI: Arabic	Canto 2

**Derivative tonality** consists of musical material that is derived from other already-existing musical material of a different tonality. In this case, all are from the atonal group. Four derivative tonalities are used:

Table 6. Derivative tonality

No.	Tonal No./Name	First appeared in
1	Tonal XI: Derived from Atonal IV	Canto 3
2	Tonal XXII: Derived from Atonal III	Canto 8
3	Tonal XXIII: Derived from Atonal II	Canto 8
4	Tonal XXV: Derived from Atonal V	Canto 10

### 2.2.2. Multitonal System

The multitonal system contains both polytonality and progressive-tonality and comprises nearly 40 percent of the opera. Twenty multitonal motives are used and are assigned Roman numerals according to the order of appearance. They are also categorized into six groups according to their similarities: ordinary, Siamese, Portuguese, minimal, major-minor, and derivative.

**Ordinary multitonality** comprises musical material that exhibits the linear multitonal tendency. There are seven ordinary multitonalities:

Table 7. Ordinary multitonality

No.	Multitonal No./Name	First appeared in
1	Multitonal I: Water	Prelude
2	Multitonal II: Annunciation	Canto 1
3	Multitonal V: False Promise	Canto 2
4	Multitonal VI: Heroic	Canto 2
5	Multitonal XII: Scheme	Canto 5
6	Multitonal XIII: Palace	Canto 7
7	Multitonal XIV: Celebration	Canto 7

**Siamese multitonality** comprises musical material that is developed from the Siamese tonality but modulates progressively. There are two Siamese multitonalities being used:

Table 8. Siamese multitonality

No.	Multitonal No./Name	First appeared in
1	Multitonal VIII: Siamese Home	Canto 4
2	Multitonal IX: Siamese	Canto 4

**Portuguese multitonality** comprises musical material that contains multitonal usage in addition to the already-existed Portuguese elements. There is only one Portuguese multitonality (in this case a polytonal one) used:

Table 9. Portuguese multitonality

No.	Multitonal No./Name	First appeared in
1	Multitonal XVII: Fandango	Canto 7

**Minimal multitonality** is comprised of musical material that combines minimal music aesthetica with progressive-tonality. There is also only one minimal multitonality used:

Table 10. Minimal multitonality

No.	Multitonal No./Name	First appeared in
1	Multitonal XX: Minimal	Canto 9

**Major-minor multitonality** comprises musical material that is derived from *Fado* music practice using both a major key and its parallel minor (or vice versa – a minor key and its parallel major) successively. Thus, only two forms are applied here:

Table 11. Major-minor multitonality

No.	Multitonal No./Name	First appeared in
1	Multitonal IV: Minor-Major	Canto 2
2	Multitonal XI: Major-Minor	Canto 5

**Derivative multitonality**, as in derivative tonality, comprises musical material that is derived from other already-existing musical material of different tonalities. In this case, four are derived from the tonal group and three from the atonal group:

Table 12. Derivative multitonality

No.	Multitonal No./Name	First appeared in
1	Multitonal III: Derived from Tonal III	Canto 1
2	Multitonal VII: Derived from Atonal III	Canto 3
3	Multitonal X: Derived from Tonal XIV	Canto 5
4	Multitonal XXV: Derived from Atonal II	Canto 7
5	Multitonal XVI: Derived from Tonal V	Canto 7
6	Multitonal XVIII: Derived from Tonal XVIII	Canto 8
7	Multitonal XIX: Derived from Atonal V	Canto 8

### 2.2.3. Atonal System

The atonal system comprises roughly 20 percent of the work. There are six atonal motives and they are categorized according to their structural appearances and technical usages. They are assigned Roman numerals according to the order of appearance.

Table 13. Atonal system

No.	Name/Musical Figure	First appeared in
1	Atonal I: Demanding	Canto 1
2	Atonal II: Gloomy	Canto 1
3	Atonal III: Furious	Canto 1
4	Atonal IV: Anger	Canto 1
5	Atonal V: Announcement	Canto 2
6	Atonal VI: Urgent Flight	Canto 8

### 3. Vocal Parts

The score calls for 14 vocal parts (six leading roles, three secondary roles, and five minor roles) for 11 singers: a soprano, an alto, three tenors, five baritones, and a bass. Apart from the ordinary operatic singing style, there are many other vocal techniques applied in the vocal lines as well such as the *Sprechstimme*, spoken monologues and the use of falsetto in male parts.

The vocal lines are constructed with emphasis on appropriate syllabic rhythms and phrasings in the English language. In addition, the parts where Thai language is employed, the correct pitch-classes of the Thai language are also taken into consideration. This is evidenced in the parts sung by the two Siamese officers in Canto 1 (measures 127–132) using upward intervals for the rising tone of the *jattawā* sound such as the words *kau* (ขอ) and *sin-ka* (สินค้า); the downward intervals for the dropping tone of the *tō* sound such as the word *tan* (ท่าน); and using the lower tone for the *ek* pitch-class when following words from other pitch-classes such as the word *sing-kaung* (สิ่งของ) when following the word *kon* (คน).

mf  
Rao kau hai tan sa-daeng rai-gaan sin-ka gam-lang kon, sing-kaung lae aa-wud.

mf  
Rao kau hai tan sa-daeng rai-gaan sin-ka gam-lang kon, sing-kaung lae aa-wud.

Example 1. Vocal lines with a transliterated Thai libretto

### 4. Instrumentations

The score calls for a conventional medium-sized orchestra (one piccolo, two flutes, two oboes, one cor anglais, two clarinets, one bass clarinet, two bassoons, four horns, two trumpets, two trombones, one tuba, three timpani, two percussion players, and strings) with an addition of the alto saxophone and the classical guitar.

The alto saxophone, being an instrument with many qualities that resemble the human voice whether it be the tonal complexity or flexibility, is suitable for accompanying or cueing the vocal lines. The example below (measures 175–179) demonstrates how the alto saxophone accompanies the vocal an octave above.

175  
A. Sax  
mf  
Pero  
And I would like the Cap-tain-Ma-jor of the Por-tu-guese ban-del to come on board as he was al-rea-dy

179  
in - formed of my ar - ri - val and would bet - ter ex - plain things to you gen - tle - men.

Example 2. The alto saxophone supports the vocal line

The presence of the classical guitar, as an Iberian instrument and one of the most recognizable Portuguese sounds, helps set up the tone of the opera with the *Fado* and *Fandango* playing styles. Moreover, being a plucked

string instrument is also appropriate for the Baroque tonality employed throughout the opera, especially in the Epistle scenes where the score calls for the Baroque music setting as in Example 3 below:

The image shows a musical score for a string instrument, likely a classical guitar, in a Baroque style. The score consists of seven staves, numbered 63 through 77. The tempo is marked as quarter note = 40. The music features complex rhythmic patterns, including sixteenth and thirty-second notes, and various ornaments. The key signature has one flat (B-flat), and the time signature is common time (C). The score is written in a single system with a treble clef and a bass clef. The dynamics are marked with a forte (f) dynamic.

Example 3. The classical guitar playing in the Baroque style

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### Istorinės-muzikinės dramos „Pero Vaz de Sequeira“ melodinė sąranga

#### Santrauka

Autorius analizuoja savo operą „Pero Vaz de Sequeira“, skirtą Portugalijos ir Tailando diplomatinėms santykiams (1511–2011) penkių šimtų metų sukakčiai paminėti. Ši analitinė esė yra viena iš kūrybinio projekto sudedamųjų dalių.

Analizuojant operą, buvo keliami tokie tikslai: 1) ištirti jos melodinę sąrangą ir stilistinę įvairovę; 2) įvardyti ir išanalizuoti muzikines sistemas (pvz., leitmotyvus, motyvines struktūras) ir kitokias kompozicines technikas.

Išskirtos trys leitmotyvų grupės: 1) Siamo, 2) Portugalijos, 3) simbolinių gestų.

Motyvinės struktūros priskiriamos trimis sistemoms: 1) tonalumo, 2) politonalumo ir 3) atonalumo. Kiekvienoje sistemoje motyvinės struktūros grupuojamos pagal tipus, atitinkančius kurį nors stilių. Tonalumui priskiriamos 25 motyvinės struktūros, grupuojamos pagal šešis tipus: a) paprastą, b) barokinį, c) siamiečių, d) portugalų, e) išvestinį. Politonalumui priskiriama 19 motyvinių struktūrų, taip pat grupuojamų pagal šešis tipus: a) paprastą, b) siamiečių, c) portugalų, d) minimalistinį, e) mažoro-minoro, f) išvestinį. Atonalumui priskiriamos 6 motyvinės struktūros, priklausančios tik vienam tipui.

## The Epic-Lyric Melody of Mikis Theodorakis: An Original Melodic Phenomenon?

### Annotation

“The asset of Mikis Theodorakis is his beautiful melodies; this is undeniable. Besides, it is, thanks to his sublime melodies that German musicians adore him...” testified Mikis Theodorakis’ muse, his main interpreter, Maria Farantouri, during our interview on January 28, 2002.

Indeed, the plurality and the diversion of the theodorakian melodies could not but intrigue our curiosity: how did they come about? How have they been treated by the composer? Which are their specific characteristics? Why are they often characterized as ‘epic-lyric’ melodies? Is the epic-lyricism of the melodies connected with the poetic text by which the composer has been inspired?

Influenced both by the rich Greek music tradition which has its roots in Ancient Greece and Byzantium and by the European Occidental music, Theodorakis’ melodies convey, at the same time, elements of the occidental lyricism and oriental epic ones.

Thus, the aim of this article is, through the music-poetic analysis of specifically chosen works by Theodorakis such as the cycles of song *Arcadias (I-X)*, the trilogy *Lyrika-Lyrikotera-Lyrikotata*, the cycles of song *Cities (A-D)* or *The Ballad of Mauthausen*, to define the ‘epic-lyric melody’ by highlighting its specific characteristics and to explain its originality. Additionally, the hidden power of the theodorakian melody, thanks to which Theodorakis’ works are often used as “a tool of struggle”, will be revealed.

**Keywords:** 20th century, Greek music, Mikis Theodorakis, epic-lyric melody.

The eminent contemporary Greek composer, politician, thinker and academician, Mikis Theodorakis (b. 1925) has been characterised, among others, as an “excellent melodist” (Holst 1980: 22). During our interview on 28 January 2002, Mikis Theodorakis’ muse and main interpreter Maria Farantouri testified:

“The asset of Mikis Theodorakis is his beautiful melodies; this is indisputable. Besides, it is, thanks to his sublime melodies that German musicians adore him...” (Stiga 2006: 1308)

Born in Chios, with origins in Crete and Asia Minor, Theodorakis was raised listening to traditional Greek music, which has its roots in Ancient Greece and Byzantium. Later, exiled on the Island of Ikaria during the Greek Civil War, he was initiated into the Greek popular music. Additionally, thanks to his studies at the Athens Conservatory and at the Conservatoire National Supérieur de Paris, he was deeply influenced by occidental classical music. The fusion of the characteristic elements of Greek traditional and popular music and of occidental classical music was inevitable and it is obvious in his works.

Besides Theodorakis asserts that he is influenced in particular by Igor Stravinsky and Béla Bartók, as far as the use of ‘national musical material’ is concerned. In his book *Where can I find my soul? – Music*, he wrote about it:

“It is normal that every generation of composers is sown in the ground left by the previous one. In my case, the reference to Stravinsky and Bartók covers one part of me: the part of our common heritage based on musical folklore with particular personality: Russian, Hungarian, and Greek. However, as far as I am concerned, the main part of my work is originated in my need to express dramatic situations. I would say that the tragedy constituted my artistic ideal and I am happy that I am completing the dream of my life by composing three lyrical tragedies (operas), *Medea*, *Electra*, and *Antigone*.” (Theodorakis, *Where can I find my soul? – Music*, 2002: 260)

In parallel, Theodorakis admits that he has also been profoundly influenced by Dmitri Shostakovich, concerning the composing of his lyrical tragedies (operas). In his interview in March 2000 to the Greek musicologist Ioulia Lazaridou-Elmaloglou, he states:

“Perhaps the influence of Shostakovich was deeper, as it has to do with my ‘symphonist self’ whose archetype was the Beethovenian symphony which, in my opinion, was expressing the spirit of ancient tragedy in music. I have to say that the ancient Greek tragic poets already represented for me, the superior aesthetic conquest compared with everything else in the intellectual and artistic world...”

Shostakovich was showing me a contemporary way of continuing the musical tragedy. His influence on me has also to do with the fact that he was representing the Soviet art in an epoch that for the Greek leftists of the civil war everything which was Soviet took the dimensions of a mythical symbol. But even in the beginning I understood the limits of my admiration for him and consequently of his influence on me.” (Lazaridou-Elmaloglou 2004: 51)

Thus, the fact that “throughout his career as a composer, Theodorakis has never given up on analyzing the demotic, byzantine and popular music and on using his rich musical past as a source of melodic inspiration”

(Holst 1980: 45), without at the same time moving away from occidental music tradition, is evident in the totality of his work. Indicatively, we mention that:

- in the *First Symphony*, Theodorakis is approaching an impressive level of orchestral writing based on the model of Shostakovich (Athens Music Hall-Giannopoulos 1999: 44)
- in the *Feast of Assi-Gonia ...*, “he uses for the first time the Greek folklore as musical material” (Ladis 2001: 42)
- in *Oedipus the Tyrant*, “he associates successfully the monophonic byzantine melos to the polyphonic technique of the Occident” (Ladis 2001: 42–43)
- in *Suite No 1* and in the last movement of the Piano Concerto as well, he uses the piano as a percussion instrument according to Stravinsky’s model:  
 “The Finale-Allegro, starts again with the piano which gives us by itself a foretaste about the general ambiance of the movement and its intensity. Themes, melodic elements are presented and repeated from the one music stand to the other in order to arrive at the piano which- treated by Theodorakis as a percussion instrument just as Stravinsky was doing- is introducing new tones with different energy ...” (Wagner 2002: 136)
- in the soundtrack of the film *Electra*, he associates the sounds of typical Greek traditional music instruments with those of symphonic instruments:  
 “In that score he is not so much interested in composing melodies or motives as in introducing themes and melodies to an orchestral composition which is accelerating the scenic and film action and intensifying the dimensions of the tragic conflict. In order to achieve its aim, he uses new sound combinations and he makes his composition much more original by using typical Greek music instruments, such as the santouri, the clarinet or the baglama. Thus, he creates an ambiance which reflects the austerity of nature and the cruelty of the feelings and the tortures of the tragic heroes. He is consequently denuding the essence of the Greek drama.” (Wagner 2002: 164)
- In the third movement of the *Symphony No 3*, he uses three important melodies of the Holy Friday:  
 “... we have to underline the amazing impression of the ‘bell’s sound’ incorporated by Theodorakis into the ‘Hymn to Peter of EPON’, in the most crucial moment of the third movement. His composition is based on the three most important byzantine melodies of the Holy Friday, that is to say of the Epitaph Lament; at that specific moment, he also uses a verse by Kavafis: ‘There is no boat for you, there is no route...’ and he adds a verse of his own as well: ‘We are all together encircled...’” (Wagner 2002: 353)
- In the soundtrack of the film *Zorba the Greek*, in the ballet *Zorba il Greco* and in the *Suite of Zorba*, he establishes a new ‘artificial’ traditional dance *the syrtaki* (which is a mixture of hassapikon and zeibekikon dances) (Wagner 2002: 164). The music of these three works “expresses the inexhaustible hope” (Wagner 2002: 395). Thanks to that music, Theodorakis  
 “achieved the goal of one of his biggest musical projects: to associate the symphonic, the popular and the Cretan music with such a mastery that the result looks purely natural, as he conceived it ‘not as an antithesis but as a synthesis’. Besides he is ‘Cretan, Greek and European’ and through that work, the Greek popular music makes its official and spectacular entry to the occidental symphonic music.” (Wagner 2002: 394)

The plurality and the diversity of the theodorakian melodies which sometimes appear as a song and sometimes as a symphony, a soundtrack or an operatic aria, could not but intrigue our curiosity. However, in the frame of that paper we will refer to the song melodies, which occupy in any case the biggest part of Theodorakis’ work.

As since his adolescence Theodorakis has already resorted to the words in order to express his innermost thoughts, his preoccupations, his joys and his sorrows, Poetry constitutes his principal source of inspiration. He chooses the poems which he sets to music according to their originality, to the messages that they convey, to the emotions that they evoke in the soul of the people. The composer himself mentions:

“There is a determinant element which guides me to one or another pathway of composition: the sensitivity of the public. There is an ambiance, an anticipation in the people which you can capture only with the antennas of the ‘soul’. If the reflexions of your soul are correct, then you are able to capture the generalised atmosphere which is covering that anticipation under the surface of the situations.” (Holst 1980: 258)

However, what are the components of the procedure which results in the ‘setting to music’? In the case of Theodorakis, we can distinguish three different situations:

- a. From the poetry to the melody,
- b. From the melody to the poetry,
- c. Simultaneous creation of the poetry and of the melody.

As far as the second case is concerned, that is to say **from the melody to the poetry**, we think that the explanation given by the composer is sufficient according to which some poets like Nikos Gatsos or Tasos Livaditis “liked to write their verses based on given music. Thus, the well-known songs *My Mother, my Virgin Mary* and *Drapetsona* from the cycle of songs *City A'* and the songs of the cycle *Lyrika* came about due to the conception of the Livaditis poetry based on given music” (Stiga 2006: 1250).

As far as the third case is concerned, that is to say **the simultaneous creation of poetry and melody**, Theodorakis takes refuge in it especially during the difficult periods of his life – when he was imprisoned or exiled. Besides, it was then that such works as *The Sun and the Time* (1967), *The Songs of Andreas* (1968), *Arcadia I* (1968), *Arcadia VI* (1969), *Arcadia X* (1969), among others, were created.

It is worth mentioning the conditions of the creation of the cycle of songs *The Sun and the Time*.

Theodorakis wrote the poetry and the music of this work, in August and September 1967, when he was continuously tortured and was waiting to be killed in cell No 4 at the police headquarters, where he was imprisoned after his arrest by the police of the junta. He refers to those conditions in his texts:

“The previous nights I was awake with my back stuck on the wall, waiting from one moment to the other, to be taken for a new torture or for execution. All my being has been marked by the expectation of death. As the time was passing insistently and cruelly, I was imagining clearly the frame of the last instant. The morning sky had a deep blue colour. ... with the advent of the new day, when the sun was getting on me, the life was starting again. The life was beating me. ... I am not a poet, but when verses started to hammer on my mind, I felt that words can be dressed in blood, that they can liberate me...” (Theodorakis, *To be enchanted and to get entranced*, 2002: 9)

Finally, as for the first case, that is to say **from the poetry to the melody**, which dominates the musical creation of Theodorakis, we think that it is better to refer back to the words of the composer who in his five-volume autobiography *The paths of the Archangel*, wrote:

“... since the beginning of my turn to music, I have not done anything but setting to music the poems that I liked to read and recite. I will allow those who wish to laugh, but I will say again that when I read a poem sometimes I ‘hear’ and sometimes I do not ‘hear’ its music. I adore Kavafis but I have never heard even one minimal melodic sound through the emotional-psychological-mental upheaval caused in me when I read his poems.” (Theodorakis, *The paths of Archangel*, 1986, Vol. 1: 135–136)

Thus, his own verses and the verses of Greek or foreign poets as well of Elytis, Ritsos, Eluard, Lorca, Neruda among others are transformed into melodies thanks to his inexhaustible inspiration, they convey his political thoughts and his artistic ideals from one generation to the other and are registered in the collective memory of the people.

However, how did these melodies come about? How were they treated by the composer?

Only the composer could answer that question which was posed to him during our interview on 9 June 2001:

“It is a very strange feeling that I cannot describe; that means that it is not a cerebral procedure. ... Suddenly when I read a poem, it is immediately transformed into music, in seconds, I do not have the time to think, from the moment that I read a poem till the moment that it shakes me, the mating is immediate, that is to say the mating and the birth, which does not happen in nature, because between the mating and the birth there is some time, on the contrary in this case these procedures are simultaneous ... Which means that my song is composed in the time of its duration; if the song lasts 3 min that means that it has been composed in 3 min and it comes about only one time! The creation of symphonic music is different; in that case, you can explore your initial material. The song is born like a child...” (Stiga 2006: 1092–1251)

The description of Theodorakis concerning the setting to music of the *Epitaph* based on the poetry by Yannis Ritsos, is characteristic:

“How did the Epitaph arrive to my hands? I do not remember. I started to leaf through it and to read it one more time. It is curious, but when poetry has to ‘speak’ to me, then sounds are gushing out impetuously, like the water of a source which comes out of the ground, joyful to have found the power to greet the sky and the light. Fortunately, I had a pencil. I ruled some staves next to the verses and I started to write quickly, just to catch up. I do not remember how many poems I have set to music. Probably twenty...” (Theodorakis, *Where can I find my soul? – Music*, 2002: 174)

The same happened, according to the composer, when he set to music *Grecity (Romiossyni)* by Yannis Ritsos as well:

“...it was the Epiphany, in 1966, somebody’s hand picked up and put on the piano the forgotten manuscripts. That day, a clash with the Police in Pireaus had taken place: my cruel beating and my harassment had a deep influence on me. So much so, that when I read the first verse: ... ‘These trees cannot fit in less sky...’, despite the fact that I was dirty with mud and blood, I composed ‘Romiossyni’ at one sitting...” (Theodorakis, *Where can I find my soul? – Music*, 2002: 176–177)

In fact, Theodorakis says that in the case of the songs, the ‘birth’ of the melody is a spontaneous and intuitive action, a non-‘thoughtful’ one. The question is: does the melody that gushes out, fit absolutely the prosody of the poetic text? According to him, Theodorakis is adapting afterwards the ‘new born’ melody, in order to respect the poetic text:

“I absolutely respected the poet. When I was deciding to set to music a poem (when I liked it) which had a word that did not suit me, out of respect to the poet, I was trying not to change it. I always started with the principle ‘that if the poet wanted it that way, it means that this is his feeling, this is it!’ Who am I to change it in order to fit my music?” (Stiga 2002: 1250)

Furthermore, after our attempt to explore Theodorakis’ principles of music composition, we will try to define the specific characteristics of the ‘theodorakian melody’ and to explain why it is often characterised as ‘epic-lyric’ melody.

The particular characteristic of the ‘theodorakian’ melody is that it contains elements coming from byzantine, demotic and popular Greek music which are processed by the composer in conjunction with his own inspiration. At the same time, he associates them with the forms of the occidental music, creating in this way an original neo-Hellenic musical language. More precisely:

a) his melodic language is tonal with modal turns, which helps him to underline the meaning of the verses through the ‘ethos’ of the ancient Greek modes according to the ancient theoreticians of music the ‘ethos’ is referred to as “the expressive character of each mode and to the fact that they could inspire the soul of the audience” (Reinach 1926, translation 1999: 77). For instance, the plaintive myxolydian mode dominates in the song *Suicide of a Month Reservist* of the cycle of songs *Lyrikotera* (1994–95) in order to express the deep sadness for the *Suicide of a Month Reservist*.

**MIKIS THEODORAKIS**  
 10. ΑΥΤΟΚΤΟΝΙΑ ΕΦΕΛΡΟΥ ΜΗΝΟΣ  
 LE SUICIDE D' UN MOIS RESERVISTE  
 (Τα Λυρικώτερα)  
 (Lyrikotera)  
 cycle de chansons

Example 1. Theodorakis M., Lyrikotera, *Suicide of a Month Reservist*, mm. 1–7

Respectively, the majestic and brave *dorian* mode is used in the song *Sorrow Revealed* of the same cycle of songs to express both the ‘revealed sorrow’ and the composure of his beloved: “Apparently you are not scared...”

14  
 Δε - φο - βί - σαι  
 De - fo - va - se

17  
 φαί - νε - ται τῆ νύ - χτα των ἀγ - γέ - λων  
 fe - ne - te ti ni - hta ton a - ge - lon

Example 2. Theodorakis M., Lyrikotera, *Sorrow Revealed*, mm. 15–18

b) the repetition of the same note which refers to the *ison* (= bass drone note) of the byzantine hymns appears often. For instance, the particular characteristics of the ‘theme E’ of the song *The Dream of the Night* from the cycle of songs *Lyrikotata* (1996) are its chromatic melodic line on the one hand and on the other hand, the motive of the accompaniment based on the repetition of the same note in parallel with the melody of the song.

Theme E

28  
 τὸ φῶ - ρος εἶ - ναι ἐξ ἑ - σέ - ως καὶ οὐ - ραν  
 ti - fo - ras e - nai ex - he - tes kai ou - ran i - sto -

31  
 ἡ - ἴ - ε - ρος σου τέ - λεση - σάν σου τέ - λεση - σάν.  
 hi - i - e - ros pou te - le - san pou te - le - san.

Example 3. Theodorakis M., Lyrikotata, *The Dream of the Night*, mm. 31–32

c) the frequent use of odd rhythms (in 3, 5, 7, 9...) which characterise the Greek demotic music. For instance, the rhythm of *ballos* (in 2/4  $\text{♩} \text{♩} \text{♩} \text{♩} \text{♩}$  in the song *The Immigrant* from the cycle of songs *City A'*),

ΜΕΤΑΝΑΣΤΗΣ  
 Emigrant

τίτλος  
 ΧΡΗΣΤΟΣ ΙΟΥ.ΙΟΥ ΜΙΚΗΣ ΘΕΟΔΩΡΑΚΗΣ

92  
 κα - ρά - βι ποὺ σέ κέν - τη - σε ποὺ σὺ - βα - ψε τὰ  
 ka - ra - vi pou se ken - ti - se pou su - va - pse ta

Variation A  
 ἄσπ - ρα γιὰ νὰ μέ - νεις μα - κρο - ἄ και  
 asp - ra gia na me - neiς ma - kro - a kai

Example 4. Theodorakis M., *City A'*, *The Immigrant*



If we consider that:

- 1) the 'epic poetry' refers to the feats, the struggles and the self-sacrifice of the heroes which deserve to be celebrated; that it is rich in noble ideas, ideological and cultural elements and distinguished by its majestic style,

and that

- 2) on the contrary, the 'lyrical poetry' expresses the thoughts, the personal experiences, the feelings and the sensitivity of the creator; it has a personal style, reveals the interior world of a human being, draws on feelings from the everyday life and is distinguished by its austere style, we can conclude that the term 'epic-lyric' is associated with the interpretation of an 'epic' poetic text in a lyric way. It has its roots in the demotic songs especially in the 'acritic' songs and in the 'paraloges' which contain narrative parts referring to the adventures and the feats of the heroes.

In the case of Theodorakis, we think that we can characterise many of his melodies as 'epic-lyric', even if he does not really use this term. These melodies reveal the 'epic character' of the poetic text through a 'lyrical' musical language.

Indicatively we will refer to:

- a) the song *The Fugitive* of the cycle of songs *The Ballad of Mauthausen* (1965) based on the poetry by Iakovos Kambanelis, who expresses in that work his painful experiences from the concentration camp in Mauthausen, Austria, where he was imprisoned from 1943 to 1945. In that song, the hopeless heroic effort of a fellow prisoner to escape is described. The dramatic element of the poetic text is reinforced through a vivid, "ostensibly joyful" melody (Holst 1980: 134)

## Ο ΔΡΑΠΕΤΗΣ

Ποίηση: **ΙΑΚ. ΚΑΜΠΑΝΕΛΛΗΣ** Μουσική: **Μ. ΘΕΟΔΩΡΑΚΗΣ**

Allegro ma non troppo

Ο Χά - nos Βέρ - άπ' τό vo - ριά τό σι - ρμα  
 'Ο Γιά - νας Μπέρ - άπ' τό δο - ρηά τό ου - ρμα  
 άν - τέ - ηι Κά - ni Kar - διά Κά - ni Ιε - ρά μέσ  
 άν - τέ - χει ná - vei nar - διά ná - vei φτε - ρά μέσ  
 στά ho - ριά του Κά - μπου τρέ - - - ηι μέσ στά ho - ριά του Κά - μπου  
 στά χω - ριά του κά - μπου τρέ - - - χει μέσ στά χω - ριά του κά - μπου  
 τρέ - - - ηι - - -  
 τρέ - - - χει - - -  
 Δός - μου κι - ρά λι - γο ψω - μι Κέ ρού - ha γά - νά - λά - -  
 άός μου κυ - ρά λι - γο ψω - μι και ρού - χα για νά - λά - -  
 λο άρό - μο ná κά - ngé - ho po - li páno á - pó  
 έω άπό - μο ná ná - νω έ - χω no - άύ páνω á - nó  
 λι - mnes ná pe - tá - - - xo páno á - pó λι - mnes ná pe - tá - - - xo.  
 λι - mnes ná ne - tá - - - έω páνω á - nó λι - mnes ná ne - tá - - - έω.

Example 7. Theodorakis M., *The Ballad of Mauthausen, The Fugitive*

b) *The Three Odes* (Ode 3 *The Volcano*, Ode 4 *In Samos*, Ode 6 *The Wishes*) of the cycle of songs *Arcadia IV* (1969), based on the poetry by Andreas Kalvos. That cycle was composed in Zatouna-Arcadia where Theodorakis was exiled during the Greek dictatorship. The epic character of the poetic work in this case is underlined sometimes by the lyrical character of the melody and sometimes by its marching character.

ΑΡΚΑΔΙΑ IV      ARCADIA IV

Ποίηση: Ανδρέα Κάλβου  
Poésie: Andreas Kalvos

Μουσική: Μ. Θεοδωράκης  
Musique: M. Theodorakis

1. ΤΑ ΗΦΑΙΣΤΙΑ  
(ΤΑ ΙΦΕΣΤΙΑ)

1. LES VOLCANS

Av - ye - ri - né tou í - li - ou a - kti - nes ti - pro - vé -  
 Á - ge - ri - vai tou ð - lí - ou á - kti - ves ti - pro - ðai -  
 - ne - te - - - - - Av - ye - ri - né tou í - li - ou ak - ti - nes  
 - ve - te - - - - - Á - ge - ri - vai tou ð - lí - ou ák - tí - ves  
 Do Fa Do  
 ti - pro - vé - - - - - ne - te - - - - - t'á - ha a - ga - pá - i ná  
 tí - pro - ðai - - - - - ve - te - - - - - t'á - xa é - ga - pá - ei vá  
 Si<sup>3</sup> Fa Do Si<sup>3</sup> Fa Si<sup>3</sup> Fa Do Fa Do Fa Do Fa Do Fa Do Fa Do  
 vé - pi é - ga li - stón to má - ti tón ou - ra - ni - on  
 ðé - sai é - ga lí - stón to má - ti tón ou - ra - ni - on  
 Fa Si<sup>3</sup> Fa Do Si<sup>3</sup> Fa Si<sup>3</sup> Fa Do Si<sup>3</sup> Fa Si<sup>3</sup> Fa Do  
 - - - - - t'á - ha a - ga - pá - i ná vé - pi é - ga li - stón to má - ti  
 - - - - - t'á - xa é - ga - pá - ei vá ðé - sai é - ga lí - stón to má - ti  
 Fa Do Do Fa Do  
 tón ou - ra - ni - on - - - - - ð - Éi - li - nes - ð - thi -  
 tón ou - ra - ni - on - - - - - ð - Éi - li - nes - ð - thi -  
 Fa Do  
 e - psi - hé - - - - - ð - Éi - li - nes - ð - thi - e - psi -  
 ai - xo - xai - - - - - ð - Éi - li - nes - ð - thi - e - psi -  
 Fa Fa Fa Si<sup>3</sup> Do Fa Fa Fa Si<sup>3</sup> Do Fa Fa Fa Si<sup>3</sup> Do  
 hé - - - - - pou is toús me - ga - lous kin - di - - - - - pou ja - - - - - ne -  
 xai - - - - - pou is toús me - ga - lous kin - di - - - - - pou ja - - - - - ve -

Example 8. Theodorakis M., *Arcadia IV, Odes, Ode III – The Volcano*

2. ΕΙΣ ΣΑΜΟΝ  
(IS SAMON)

2. A SAMOS

Andante

Ós - si to hái - ke - on hé - ri va - ri tou í - vou es -  
 ð - sai to chá - kai - on xé - ri ða - ró tou í - vou es -  
 Fa m Do  
 thá - non - te - - - - - ós - si to hái - ke - on hé - ri va -  
 ða - non - tai - - - - - ð - sai to chá - kai - on xé - ri ða -  
 Si<sup>3</sup> m Do Fa m Do  
 ri tou í - vou es - thá - non - te - - - - - zi - gón dou -  
 ró tou í - vou es - thá - non - tai - - - - - zi - gón dou -  
 Do Fa m Mi<sup>3</sup> Do Fa m Do  
 li - as as é - hou - si - - - - - zi - gón dou - li - as as  
 lei - as as é - xou - si - - - - - zi - gón dou - lei - as as  
 Fa m Mi<sup>3</sup> Do Fa m Do  
 é - ho - si - - - - - thé - li a - re - tin ké - tól - min  
 é - xou - si - - - - - thé - li a - re - tin ké - tól - min  
 Si<sup>3</sup> m Do Fa m Do  
 i - e - lef - te - ri - a - - - - - thé - li a - re - tin ké - tól - min  
 i - e - lef - te - ri - a - - - - - thé - li a - re - tin ké - tól - min  
 Si<sup>3</sup> m Do Fa m Do  
 i - e - lef - te - ri - a - - - - - Af - ti ké - ó  
 i - e - lef - te - ri - a - - - - - Af - ti ké - ó  
 La<sup>3</sup> Do Fa m Do  
 mi - thos kri - pti nóu n a - li - thi - as - - - - - ep - té - ros se tón  
 mú - ðos kpi - pti nóu n a - li - thi - as - - - - - ep - té - ros se tón

Example 9. Theodorakis M., *Arcadia IV, Odes, Ode IV – In Samos*

3. ΑΙ ΕΥΧΑΙ  
(E EFHÉ)

3. LES VOEUX

Allegro Moderato

Tis tha - lás - sis ka - li - te - ra - - - - - pou - ko - mé - na tá  
 tis ða - lás - sis ka - li - te - ra - - - - - pou - ko - mé - na tá  
 Fa Do  
 ki - ma - ta - - - - - ná - pni - xoun tin pa - tri - ða - mou - - - - - ós -  
 ký - ma - ta - - - - - ná - pni - xoun tin pa - tri - ða - mou - - - - - ós -  
 Si<sup>3</sup> Fa Do  
 sán a - pé - pi - smé - nin - - - - - é - ri - mon vár - kan -  
 sán a - pé - pi - smé - nin - - - - - é - ri - mon vár - kan -  
 Fa Si<sup>3</sup> Fa Do  
 sin ste - rián stá - mis - si - a - - - - - ka - li - te - ra mi - an  
 sin ste - rián stá - mis - si - a - - - - - ka - li - te - ra mi - an  
 Fa Do  
 í - lo - ga - - - - - ná - ði - pá - n - tou hi - mé - nin - - - - - tró - gous - san  
 í - lo - ga - - - - - ná - ði - pá - n - tou xu - mé - nin - - - - - tró - gous - san  
 Si<sup>3</sup> Fa Do  
 pó - - - - - lis óás - si - - - - - la - óús - ké - el - pi - - - - - ðas -  
 pó - - - - - leis óás - si - - - - - la - óús - kai - éλ - pí - - - - - ðas -  
 Fa Fa Fa Si<sup>3</sup> Fa Do Fa Fa Fa Si<sup>3</sup> Fa Do Fa Fa Fa Si<sup>3</sup> Fa Do  
 ka - li - te - ra ka - li - te - ra - - - - - di - as - kor - pis -  
 ka - li - te - ra ka - li - te - ra - - - - - di - as - kor - pis -  
 Do Fa Do  
 mé - ni i - Éi - li - nes - - - - - ná - tré - hos - si tón kós - mon -  
 mé - ni i - Éi - li - nes - - - - - ná - tré - hos - si tón kós - mon -

Example 10. Theodorakis M., *Arcadia IV, Odes, Ode VI – The Wishes*

- c) the song *They were Lost so Early* from the cycle of songs *Lyrika* (1976), based on the poetry by Tassos Livaditis. As all the songs of this cycle, this one also, refers to the “lost generation” of the Resistance, in which belong both the poet and the composer, that is to say to all these people who believed in the high ideals, who struggled and sacrificed themselves for freedom. At the same time, these songs refer to some of these fighters who survived and have been obliged to live with the sorrow of the defeat. An especially lyrical melody accentuates the semantic content of the verses. That song with the title *Cherubic Hymn for our Brothers of the Rain* has been included by the composer in the *Liturgy No 2 – For the Children Killed in the War*.

**2. ΧΑΘΗΚΑΝΕ ΤΟΣΟ ΝΩΡΙΣ**  
**ILS ONT DISPARU DE SI TÔT**  
 (Το Άγιοσ)

(Les Lyriques)  
 Cycle de chansons

Poésie: TASSOS LIVADITIS

The musical score is presented in three systems. Each system includes a vocal line (Canto) and a piano accompaniment (Piano). The lyrics are written in both Greek and French. The tempo is marked as ♩ = 80. The score is in G minor, 3/4 time. The lyrics are:   
 System 1: Χα - θη - κη - νε - τος - ο - νω - ρι - σ / Η - θη - κη - νε - τος - ο - νω - ρι - σ  
 System 2: ο - ρι - σ - ο - νω - ρι - σ - ο - νω - ρι - σ / ο - ρι - σ - ο - νω - ρι - σ - ο - νω - ρι - σ  
 System 3: ο - νω - ρι - σ - ο - νω - ρι - σ - ο - νω - ρι - σ / ο - νω - ρι - σ - ο - νω - ρι - σ - ο - νω - ρι - σ

Example 11. Theodorakis M., *Lyrika, They were Lost so Early*

Additionally, we are wondering about the origins of the hidden power of Theodorakis' songs thanks to which they touch, despite their verses in Greek, a non-Greek speaking audience and they become a powerful 'tool of struggle'.

According to the singer Nena Venetsanou, “the rhythm which characterises Theodorakis' songs, even the more lyrical, generates intensity and incites revolution” (Stiga 2006: 1354). On the contrary, the singer Manolis Mitsias believes that “as the music is an international language, people who do not speak Greek, like mainly the music; they are exulted by the music itself and are ready to revolt if necessary; that is due to the power of the melody...” (Stiga 2006: 1316)

Finally, the composer himself considers that the influence of his music on the non-Greek speaking audience is based exclusively on the ‘music itself’. He states about it:

“Music is a mystery which proves that it is not limited by the language. It proves that the humanity is united, that the human sensitivity is unique! Maybe there are the borders of some cultures, like the Japanese, the Chinese or the Indian, which are distant but the main point, is that wherever Europeans have been to, they have created something common; there is a common culture, a common sensitivity... When we listen to a beautiful music, when we listen to a beautiful song, we are not interested in the language, we do not hear the words, we are attracted by the melody... The melody is the result of a birth... The song is an element of life on which every one of us can lean intellectually and physically and be supported. ... We are extremely influenced by the song, especially by its original melody, when there is one...” (Stiga 2006: 1265–1266)

To summarize, based on the aforementioned, we note that the originality of the ‘theodorakian melody’ in general and of the ‘epic-lyric theodorakian melody’ in particular, lies: a) in the choice of poetic texts in relation to their semantic content which transform them into bearers of humanistic ideals, b) in the absolute respect of the prosody of the poetic text, c) in the inspired integration of elements of byzantine, demotic and popular Greek music (scales, rhythms, orchestration etc) and in their harmonic coexistence with elements of the occidental European musical tradition. Thanks to all of these, the ‘theodorakian melody’ meets the traditions and the sensitivity of foreign peoples and becomes an “international diachronic common language”.

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## Epinė-lyrinė Mikio Theodorakio melodija: originalus melodinis fenomenas?

### Santrauka

„Mikio Theodorakio muzika yra labiausiai vertinama dėl jo nuostabiai gražių melodijų; to neįmanoma paneigti. Beje, būtent dėl tauraus melodijų grožio jo muziką taip mėgsta vokiečių atlikėjai“, – tvirtino kompozitoriaus mūza, nuolatinė jo dainų atlikėja Maria Farantouri, iš kurios 2002 metų gruodžio 28-ąją man teko imti interviu.

Theodorakio melodijų gausa ir įvairovė iš tiesų žadina tyrinėtojo smalsumą: kokios šių melodijų sukūrimo aplinkybės? Kaip jas traktavo pats kompozitorius? Kokie jų būdingieji bruožai? Kodėl jos dažnai apibūdinamos kaip „epinės-lyrinės“ melodijos? Ar melodijų epinį lyriškumą nulėmė kompozitorių įkvėpę poetiniai tekstai?

Theodorakio melodikoje, kurią, viena vertus, maitina turtinga graikų muzikos tradicija, savo istorija siekianti antikinės Graikijos ir Bizantijos laikus, o kita vertus – europinės muzikos įtaka, susipina vakarietiška lyrika ir rytietiškas episkumas.

Straipsnyje pateikiama pasirinktų Theodorakio kūrinių (pirmos dešimt dainų iš ciklo „Arcadia“, trilogija „Ta Lyrika – Ta Lyrikotera – Ta Lyrikotata“, dainų ciklai „Cities“ (A'-D') ir „Mauthauzeno baladė“) muzikinė ir poetinė analizė, kurioje siekiama apibrėžti, kas yra „epinė-lyrinė“ melodija, išryškinti jos būdinguosius bruožus ir paaiškinti originalumą. Kartu stengiamasi atskleisti Theodorakio melodijose slypinčią jėgą, dėl kurios kompozitoriaus kūriniai dažnai pavadinami „kovos ginklais“.

# 3

MELODIJA MELODY IN  
ŠIUOLAIKINĖJE CONTEMPORARY  
KOMPONAVIMO COMPOSING  
PRAKTIKOJE PRACTISE



## Melody in Experimental Music: An Excursion

### Annotation

This article seeks to locate and discuss – somewhat informally – occurrences of melody within experimental music (so-called). From a certain perspective, this would seem incongruous, as midcentury experimentalism (of the East Coast in particular) set itself up as revisionary, to be constructed from first-principles rather than from an appeal to established musical expectations or precedents. But nonetheless, for many composers of an experimentalist bent – here discussed are Partch, Cage, Johnston, as well as a number of other figures – the role of melody in their music has been marked. Within the contexts of experimentalism, use of melody obtains a curious mix of reference to the past and to ordinary (or not-so ordinary) life. Notably mentioned in this article are two Canadian composers, Martin Arnold and Cassandra Miller, whose unique approach to melody is striking, as well as, British composers Tim Parkinson and Laurence Crane, and Lithuanian Rytis Mažulis.

**Keywords:** melody, experimentalism, ordinariness, plainness, mnemonics.

Is there a straightforward way to deal with this thing that gets called “experimental music”? Is there really such a thing *as* experimental music? What are we actually talking about, when we talk about it? Robert Ashley once put it like this: “Composition is anything but experimental. It is the epitome of expertise. It may be aleatoric or purposefully unpredictable in its specific sounds, or purposefully exploratory of a sound, but experimental is the wrong word.”<sup>1</sup>

In a short article from 1978, Ben Johnston used capital letters to refer to the American Experimental Tradition. For Johnston, this represented something of an experimental attitude, quintessentially American – something rough-hewn, something rugged, existing on some margin. Something that afforded a different regime of subtlety than one could encounter in European tradition. However, to push it out as such – with capital letters – is deliberate artifice; if there was not a sense of artificiality to the designation at the time, then there certainly must be now.

While one might want to characterise experimentalism as being essentially linked – enjoined – to ideas of indeterminacy, for Johnston it was misleading to think of experimental music beginning with Cage. Johnston suggested that at least the tradition inasmuch as could be explicitly American – and in any case, all such traditions are invented – that the tradition should stretch from William Billings and Anthony Philip Heinrich. Indeed, it is good to remember that at the time he was writing, a considerable quarter of any such a tradition should be regarded to be taken up by Partch.

Today, the Dionysian expressiveness of Harry Partch is not usually taken to be definitive of experimental music (as Partch put it: “you never see my experiments”), inasmuch as, usually, younger composers who self-identify as experimental do not tend to cite him as an influence. But given the character and mood of later practitioners’ musical attitudes, the idea of an experimentalism that isn’t Apollonian is something to hold on to. The idea of a Partchian experimentalism – despite his loathing of Cage, and dislike of his association with the composer – nevertheless has a good deal to offer. (Think of the music of Lou Harrison, Dane Rudhyar, Peter Garland, La Monte Young, even Charlemagne Palestine, Glenn Branca.) Nevertheless, it is clear that Cage, the other half of the balance, the Apollonian, these days is the person who, even posthumously, gets to stake out the playing area.

From the beginning, one of the more notable aspects of Partch’s compositional project was its focus on melody – song, monody – beginning with the Bardic works utilising adapted viola. Throughout Partch’s career, enfolded into his pieces would be an often imaginary vernacular, of song, of dance, of wake, of ritual. A return to such materials, base in every sense, was part of his fundamental impulse to revise – or, more plainly, simply discard – all of the Western musical models inherited since the Renaissance.

Generally speaking, Partch’s revisionism was too specific to be adapted. Even for Johnston – some years Partch’s apprentice – the inclination to parrot Partch’s not inconsiderable achievements did not arise. If we take the liberal metaphor, Partch was not particularly saleable in the ‘music aesthetics ideas marketplace’. Unlike Cage, a composer wishing to follow Partch required familiarity with a recondite music theory; worse, it required understanding fractions. It required serious efforts in organology. It was borne from a person whose own habits and idiosyncrasies – and homosexuality – might inspire discomfort; it might be implied one had to sign up to these things. He didn’t give lectures in Germany. He did not give lectures anywhere.

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<sup>1</sup> Quoted in Bob Gilmore, ‘Five Maps of the Experimental World’, *Artistic Experimentation in Music*, ed. Darla Crispin, Bob Gilmore, Leuven, 2014, p. 24.

**The Potion Scene**  
*from Shakespeare's Romeo and Juliet*

Harry Partch  
*Helmholtz-Ellis notation by A.N. McIntosh, March 2010*

**slow, but constantly changing tempo**

voice

adapted viola

[whole of accompaniment up to double stops near end to be played on the G string]

*p*

4

7

Fare - well!

God knows when we shall meet a - gain.

Example 1. Harry Partch's *The Potion Scene* from *Romeo and Juliet*, for intoning voice and adapted viola. Edited by Andrew Nathaniel McIntosh. Note the use of bare fifths – or as Partch would refer to them, 3/2 s.

Example 2. John Cage, *Cheap Imitation*, opening. Version for violin, edited in 1977

Partch's aesthetics also required such an emphasis placed on melody – song – which, in the contexts of mid-century modernism and abstraction seemed misplaced if not expressly backward. Nevertheless, I want to suggest that melody and line became of great importance to post-Cageian experimentalism too.

One might be tempted, say, to turn to Cage's early pieces, *Sonatas and Interludes*; while these are some of Cage's most well-known pieces, and no doubt have some influence, they are something of a red herring.

On the other hand, *Cheap Imitation* (1969), a piece of twenty years later, has had I believe quite a considerable effect on music of the 1970s and later. The piece arrived almost by accident. A licensing difficulty arising from the French owner of the rights, Cage was forced to construct a version of Erik Satie's *Socrate* – Merce Cunningham having already choreographed a significant portion of the work – that maintained its rhythm but dispensed with its linear specifics. The resulting piece may well be one of Cage's most personal works; it's also one of his most intuitive. Its language manages to combine the blithe, slightly spongy, semi-dissolved squareness of Satie, with Cage's own "normal but not normal" world of transformed commonplace. Where Cage's pieces of the 1950s and 1960s had sometimes felt severe, *Cheap Imitation* obtains the smile of Zen that is so present in his writings – the character of the monk who, having achieved enlightenment returns to his previous mundane routines and prosaic duties unchanged apart from floating 'the feet a little bit off the ground'. For Cage, *Cheap Imitation* solidified his spiritual connection to the smiling, edge-like, nomadic Satie, man of white foods and identikit brown suits. The figure so admired by Cocteau and his coterie, but whatever their efforts were never fully rendered scrutable.

A brief digression. What might be the essential characteristic of Cageian experimentalism? I think it can be seen as a fundamental inversion – an inversion that is crystallised in *4'33"* and is consolidated in *0'00"*. It is the effort to try to turn the composer into just another listener – or, equivalently, to make the listener into something more of a composer. More generally, Cage predominantly wanted to revise inherited models of *listening*. By reconfiguring music in this way the effort is to try to make music something that is actively brought into being *by* the listener; and that on the other hand, the composer sets out along the line of the composition *in order* to become this kind of listener. The important aspect of *0'00"* then ('In a situation provided with maximum amplification, perform a disciplined action') is not the performance *per se*, it is the *situation*. What would it mean for a situation – in other words, the world – to be maximally amplified? It is amplified because audible. It is audible because *aesthetic*. The disciplined action, in the end, exists to *fully amplify* the situation, not the other way around.

The melodic world of *Cheap Imitation* (along with Cage's other pieces from the period, such as *Apartment House 1776*, as well as much of the music of Christian Wolff) seeks to achieve this inversion through, largely, inherited musical material and its *playing*, rather than through, say, the institution of a *sound*. Melody is only really possible once music is more – or, even, less – than just "sounds". Such music does not make fetish of timbre. What it does do is create a situation where the musicians might have to come to terms with an array of material that is fundamentally incomplete, and can never be completed. Surface simplicity – even a degree of 'normalcy' – belies an underlying ineffability. Whatever is so apparently normal recedes forever from one's touch. Such music exists to create for the performers – and the listeners – a wider situation of greater amplification; amplification because understanding, but a kind of innately Socratic understanding. That the discipline, the simplicity and incompleteness of the material and its aesthetics underline our inability to fully comprehend the world. The music's incompleteness – and the responsibility this grants us – mirrors the natural incompleteness of the world. A certain Socratic understanding grants for us a modest but specific agency in the face of this incompleteness.

In the end this kind of experimental music is not primarily about overwhelming musicians and listeners with the exotic; it can often be more about giving them – granting them – a new listening to the, apparently, entirely ordinary. This is what *Cheap Imitation* does. Benjamin Piekut puts it well: "experimentalism performs not simply a return to daily life but an intensification of it – a peculiar mix of the commonplace and the singular. Experimentalism is both ordinary and extraordinary. It is the everyday world around us, as well as the possibility that this world might be otherwise."

This alighting on the melodic, in Cage's work, did something by osmosis not just to Cage's later work, but also mirrored or coalesced with similar concerns arising at the same time in other composers' work also. By "melodic", I intend to mean those things that somehow transform (mere) linearity into something closer to the "tunelike – small yet giant details such as the difference between a leading tone and a simple semitone. The melodic is what renders the linear mnemonic. And indeed, given the New York School's somewhat vaunted desires for *tabula rasa*, for sounds being themselves (whatever that might mean), for sounds being unconnected to each other but simply alongside one another, the presence of the melodic apparently would run counter both to experimentalism's spirit and practice.<sup>2</sup>

<sup>2</sup> In this relation, Cage wrote: "The question of leading tones came up in the class in experimental composition that I give at the New School. I said, 'You surely aren't talking about ascending half-steps in diatonic music. Is it not true that anything leads to whatever follows?'" in *Silence: Lectures and Writings*, Hanover: Wesleyan U. Press, 1961. See *Cheap Imitation*, bb. 5–6 (Ex. 2).

The past always finds a way in for itself. Shortly after Cage's re-writing of *Socrate*, in 1971 Morton Feldman completed *Rothko Chapel*, a large, major statement composed in memory of the late Mark Rothko, to be performed in the chapel he developed in Houston with John and Dominique de Menil. The piece, which was responding to some of the darkest and most complicated paintings Rothko ever produced, makes, alongside a wordless choir and ensemble, a particular feature of a solo viola. The delicately spiralling, crystalline, internally rotating lines of the viola from our perspective seem to look forward in time to Feldman's later music. Indeed, the presence of the viola would solidify something quite personal for Feldman; concurrently he was composing *The Viola in my Life*, for that instrument and ensemble.

The image shows a musical score for Morton Feldman's *Rothko Chapel*, specifically measures 310 through 330. The score is written for two staves: Vibraphone (Vibr.) and Viola (Via.).

- Measure 310:** The Vibraphone part begins with a tempo marking "J = 52 exactly" and a dynamic marking "pppp". The Viola part has a dynamic marking "et sim.". There are two circled measure numbers, 310 and 315, above the staves.
- Measure 315:** The Vibraphone part continues with a dynamic marking "mp very, very simply".
- Measure 320:** Similar to measure 310.
- Measure 325:** Similar to measure 310.
- Measure 330:** Similar to measure 310.

Example 3. Morton Feldman, *Rothko Chapel*, from b. 314

But perhaps the most personal – and inscrutable – response of Feldman's came at the end of the piece, in its now famous coda. After great panels, steles, of vocal writing, moving like flocks of stone, at the end of the piece unexpectedly arrives an almost Stravinskian ostinato on the vibraphone. (Stravinsky had died also shortly before.) Above this is heard a heptatonic, modal melody, on the viola – a melody that dwells on dominants, subdominants and tonics, on the lowered seventh, on the diatonic tetrachord. A melody dredged up apparently from Feldman's own late childhood, an early attempt at composition.<sup>3</sup> Feldman's response perhaps implies a looking 'full-circle' about death; that death brings us, whether we want to or not, to look at our memories. The mnemonic becomes the memorial. But while Rothko's transcendental universalism, his paintings that perhaps imply the grandeur – and terror – of the universe and its dwarfing of us, Feldman resolves the human figure in this scene more explicitly. For Feldman this melody seeks to gesture even more violently at the

<sup>3</sup> See Stephen Johnson, "Rothko Chapel and Rothko's Chapel", *Perspectives of New Music* Vol. 32, No. 2 (Summer, 1994), pp. 6–53. Johnson repeatedly refers to the melody as a 'Hebrew tune', though at present I'm unaware of its source as a Hebrew hymn. See also Alex Ross, "American Sublime: Morton Feldman's mysterious musical landscapes", *The New Yorker*, June 2006, <http://www.newyorker.com/magazine/2006/06/19/american-sublime>

mystery of personhood. That the sheer *ordinariness* of one's personhood is the route towards its mystery, its transcendence. To respond to such metaphysical enormity, such rendering of the sublime, with a melody of such innocence, is as bold as it is unsettling, and like Cage's own piece of a few years earlier, indelibly inscrutable. It imbibes indeterminacy because indefinite. Following Rothko's paintings, as much as it is a door into the beyond Feldman's *Rothko Chapel* is a door into his entire late project – the wider still and wider expressions of the 1970s and 1980s following on, piece by piece, from this beginning essay. While not wanting to push any such interpretation too heavily, nevertheless, what would it mean for Feldman to begin this period of his later working life with a dredging up of the melodic?

untitled cello & piano tim parkinson

piano

♩ = 88-92

cello

*p* simple, carefree (legato and freely phrased)

con sord.

Example 4a/b. Tim Parkinson, *Untitled Cello and Piano*. The parts are not synchronised

This substance that is somehow melodic: are there any other composers who might be working along these lines? I want to point to a few. The first is British composer Tim Parkinson (b. 1974). Parkinson's music works from the starting point largely aligned with Christian Wolff. But there are differences – of approach and of music sense; he has a particularly acute sense of harmony, and melody too. Parkinson's aesthetic can be, often, deliberately plain. But plainness in his music points to a deeper, more inaccessible aesthetic, an aforementioned aesthetic of incompleteness. Pieces of his often involve simple juxtapositions of pages of material – pages given to musicians in no particular order, played through at the performers' pace. But one of the defining characteristics of Parkinson's music is its diversity – while material is enfolded into a single continuity, rarely if ever does any material return. Entire pages-worth of material appear and disappear as

quickly as they appeared. Where traditionally the artwork is held to be a kind of additive object – the piece is more than the sum of its parts – in Parkinson’s music, the piece can somehow be *less* than the sum of its parts. This is mysteriously *subtractive* music.

Another composer whose work I think is relevant is the Canadian Martin Arnold (b. 1959). His music is largely concerned with continuity, with wandering, meandering. In Arnold’s music, music never repeats itself, but neither does it change much. It exists as if floating around or between variously nearby loci. (Arnold, when he isn’t composing, works as a gardener.) He is not interested in dramatic or narrative disjuncture. His pieces do not have ‘sections’ *per se*; the music continues, and if it changes en route, this is just part of its continuity. Composing for him requires figuring out for how long a certain range of material should exert itself – how much space it should take up – so that if a change occurs it will not be perceived as rhetorical, but merely “just some more music”.<sup>4</sup> If there are points in his music they are rather more like way markers, mile posts. Points in a landscape that do not ‘articulate’ the landscape inasmuch as the landscape is non-articulatory, or articulates itself in its own way. His personal aesthetics were influenced by his teacher, the Czech émigré composer Rudolf Komorous, who himself had an aesthetic he called *estetiku divnosti* – aesthetics of strangeness, curiousness. *Divnosti* is also related to *divny* – which is polysemous with aspects of the divine as well as the strange.<sup>5</sup> This became transmuted via translation into English into Arnold’s ‘aesthetic of the wonderful’. For Arnold, the music is not ‘about’ wonder; it does not make wonder its topic. Rather, the music attempts to directly provoke – in a small way – these feelings; of mystery, of strangeness, of simultaneous seriousness and non-seriousness. Of incompleteness. His music is influenced by dance forms – often slowed down to an undanceable rate – and fourteenth-century polyphony. Like Partch, Arnold’s music often seems to invoke some imaginary vernacular, some kind of invented folk music.<sup>6</sup>

♩ = 50 W=whistle the pitch W is above (in any octave)

flute

pp

piano

pp (una corda pedal suppressed throughout)

4

Example 5. Martin Arnold, *Latex* (2011) for flute and piano

<sup>4</sup> Personal communication, May 2015.

<sup>5</sup> See Martin Arnold, “Thinking the Wonderful: After Rudolf Komorous, beside the Reveries”, in *Canadian Cultural Poesis: Essays on Canadian Culture*, ed. Garry Sherbert, Annie Gérin, Sheila Petty, Waterloo: Wilfried Laurier U. Press, pp. 305–322. See also an interview with Arnold, in Paul Steenhuisen, *Sonic Mosaics: Conversations with Composers*, Edmonton: U. Alberta, 2009, p. 155.

<sup>6</sup> Hear a recording of Arnold’s *Latex* here: <https://soundcloud.com/musica-mundi-1/arnold>

One of Arnold's close associates is another Canadian composer, Cassandra Miller (b. 1975). Like Arnold, her music is largely concerned with this very distinct sense of continuity, often achieved using melodic means. Like Arnold, she is interested in a kind of refracted or bent vernacular. But unlike Arnold, her exposure to Dutch music – and her own personal sensibility – introduce a certain narrative or dramatic component to her music. This piece, *Bel Canto*, takes as its starting point the singing of Maria Callas, the material split across two ensemble groupings.<sup>7</sup> Here too, there is a peculiarly *divvy* transformation of relatively 'normal' musical things – triads, vibrato, glissando – into a musical aesthetic of deep peculiarity. Miller manages to make such things as bare scales into things, which are puzzlingly ineffable – her piano piece<sup>8</sup> *Philip the Wanderer* dwells on scales until they seem to both lose their prosaic content and gain something completely unobtainable.

Example 6a/b. Cassandra Miller, *Bel Canto* (2010).  
There are two separate semi-independent scores,  
for singer and flute/clarinet/guitar and for violin, viola and cello

<sup>7</sup> Hear recording here: <https://cassandramiller.files.wordpress.com/2010/04/bel-canto.mp3>.

<sup>8</sup> See <https://soundcloud.com/cassandra-miller-composer/philip-the-wanderer-full-piece>, the beginning of the second section, from 7:54 with its descending scales, and in particular the final section of the piece, from 14:00.

Another composer I want to mention is Rytis Mažulis (b. 1961). Like Miller, repetition is an important aspect to Mažulis' work – indeed for Mažulis it is crucial. But Mažulis' specific approach to repetitive musical structures owes less to the tape experiments of the American minimalists as much as it does to Lithuanian melodic *sutartinės*, important sources of influence not only for composers of Mažulis' generation (such as Ričardas Kabelis and Šarūnas Nakas) but also pioneers such as Bronius Kutavičius and Julius Juzeliūnas. One interesting piece of Mažulis' I wanted to highlight is a relatively early work, *The Sleep*.<sup>9</sup> This piece is quite fascinating from a melodic point of view – its concern with “dominants” and “tonics” turns its material, despite its bareness, from being (merely) linear into something more specifically melodic. The self-similarity of the line provokes the listener into hearing it in a highly mnemonic, “memorial” way; the melody is constantly “inheriting” itself through canon. And through its reference to an inherited diatonic world, not only through its emphasis on simultaneous major seconds in the voices, a common feature in *sutartinės*, but also in its modal organization, implies another litany of inheritance. Is this what melody is? A kind of “mnemonic” line? Mnemonic because sedimenting so much that is inherited (both local to the immediate musical structure, and more widely cultural)? A line “made mnemonic”? I like this piece of Mažulis because it seems to somehow encapsulate the very basics required to turn line into melody.

The image shows a musical score for 'The Sleep' by Rytis Mažulis. It consists of three systems of staves. The first system has three staves: a vocal line with lyrics 'ga-', 'a-', 'at'; a second vocal line with lyrics 'uz', 'mig-', 'siu'; and a string line with the instruction 'con sord' and 'pp'. The second system has two staves: a vocal line with lyrics 'at-', 'min-', 'ty'; and a string line with lyrics 'vai-', 'kys-', 'tej'. The third system has two staves: a vocal line with lyrics 'vai-', 'kys-', 'tej'; and a string line with lyrics 'at-', 'min-', 'ty'. The score includes dynamic markings like 'pp' and 'con sord', and various musical notations such as notes, rests, and bar lines.

Example 7. Rytis Mažulis, *The Sleep* [*Miegas*] (1988), for 8 singers and 4 string instruments

Finally, another composer who concerns himself with such basics is British composer Laurence Crane. Crane's music too is interested in repeating things, and it too is concerned with a certain 'transformation of the commonplace'. In pieces such as this one – *John White in Berlin* – tonal material is presented in such a reduced state so as to show it at its very beginnings.<sup>10</sup> Or its very endings. Tiny essays in voice-leading, in suspensions, or the (in)stability of some triad or leading tone. As Michael Pisaro points out, these aspects of Crane's music are

things that most composers of our age learned at the very beginning of our training. They have the fascination of a raw material, but we were encouraged to move along past them, not to dwell on such apparently simple objects. However when you look at them closely, under the microscopes of isolation and repetition, such things can seem to be the real miracles of music.<sup>11</sup>

<sup>9</sup> Hear Erik Carlson's recording of this piece here: <https://erikcarlson.bandcamp.com/track/rytis-ma-ulis-the-sleep>

<sup>10</sup> Hear this piece here, in a recent recording by Anton Lukoszevics and Apartment House: <https://www.youtube.com/watch?v=JMhB66HRIUw>. Ex. 8 begins c. 10:50.

<sup>11</sup> From Michael Pisaro's essay on Crane, "Less than Normal", 2014, on the record label Another Timbre's website <http://www.anothertimbre.com/laurencecrane.html>.

The image displays a musical score for Example 8, consisting of two systems of music. The first system covers measures 171 to 175, and the second system covers measures 176 to 180. The score is written for four instruments: Electric Guitar (E. Gtr.), Violin (Vc.), Percussion (Perc.), and Piano (Pno.). The time signature is 5/4. The E. Gtr. part features complex rhythmic patterns with many beamed notes. The Vc. part has a more melodic line with some rests. The Perc. part includes a section labeled 'MEDIUM TAM-TAM' with a wavy line indicating a specific texture. The Pno. part has a dense, textured accompaniment with many beamed notes. Pedal markings '(Ped.) →' are present at the end of both systems. A double bar line with repeat dots is located between the two systems.

Example 8. Laurence Crane, *John White in Berlin*, from b. 171

Crane can dwell on these things – small lines, triads, inversions, suspensions – because they indeed are miraculous; because they are *divny*. What is melody? Is it something that is baked into our heads, stuck there, an assortment of children’s songs, whistled tunes, idle hummings? Ordinary trappings, ordinary music; we swim around in it, with it inside us? Pisaro again: “It would not surprise me if someone hearing Crane’s music for the first time would say something like, ‘It sounds like ordinary music.’ This ordinariness is right there on the surface. If I have learned anything from Laurence’s music it is that ‘the ordinary is not’.” Amen to that.

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## Melodija eksperimentinėje muzikoje: ekskursas

### Santrauka

Straipsnyje kiek laisvesniu nei mokslinio tyrimo stiliumi stengiamasi aptikti ir aptarti melodijos apraiškas vadinamojoje eksperimentinėje muzikoje. Tam tikru požiūriu melodija šioje terpėje atrodo lyg svetimkūnis, turint omenyje, kad XX a. vidurio eksperimentalizmas (ypač Amerikos rytinėje pakrantėje) kilo kaip revizionistinis judėjimas, siekęs iš naujo atrasti pirmąkartinius kūrybos principus, o ne pataikauti įsitvirtinusiems lūkesčiams ar precedentams. Nepaisant to, melodijos vaidmuo gana ryškus daugelio eksperimentinio sparno kompozitorių – Harry'o Partcho, Johno Cage'o, Beno Johnstono ir nemažo būrio kitų veikėjų – kūryboje. Eksperimentinės kūrybos kontekstuose melodijos vartojimas įgijo keistą konotacijų derinį, pasireiškiantį kaip nuorodos į praeitį ir įprastą (kartais gal ir ne visai įprastą) gyvenimą. Straipsnyje minimi du unikaliu požiūriu į melodiją pasižymintys Kanados kompozitoriai Martinas Arnoldas ir Cassandra Miller, taip pat britų kompozitoriai Timas Parkinsonas ir Laurence'as Crane'as bei lietuvis Rytis Mažulis.

**Reikšminiai žodžiai:** melodija, eksperimentalizmas, įprastumas, paprastumas, mnemonika.

## Composing Microtonal Melody

### Annotation

Dealing with microtonal music, various problems of composing melody should be considered. The result of the compositional approach and technical means depends on which particular type of the linear model is applied. There are five main categories of microtonal melodic models: motif-based structure (related with traditional melodic patterns); pendulum motion of melodic line; microphonic contour (hardly comprehensible changes of smallest microintervals); gliding notes technique (based on the application of extended *glissando* passages for the whole composition, in which the *glissando* gestures are not decorative, but strictly structuralized elements); resulting patterns (occurring in cases when the melodic pattern is not 'composed' as a line, but results from the interaction of various structural parameters). All of these models could be illustrated with my vocal and instrumental compositions "Sybilla", "Palindrome", "Talita cumi", "ajapajapan", "Canon mensurabilis".

**Keywords:** microtonal music, quartertones, linearity, canon technique, equidistant subdivisions, melodic models, motif-based structure, pendulum motion, microphonic contour, resulting patterns, gliding notes.

Dealing with microtonal music, various problems of composing melody should be considered. It is important to emphasize that the conception of linearity in microtonal music depends on two factors:

- role of microintervals in the musical material;
- perception of applied intervals.

When we are dealing with quartertone music based on conventional rhetorics, like "Three Quarter-Tone Pieces" by Charles Ives, the traditional notions as melodic shape, linear pattern, or expressive gestures are still valid. However, the effect might be certainly different for the piece composed of much smaller intervals (2 or 3 cents approximately), like in some of my compositions that will be discussed later.

The composer, who decides to deal with microtones in his composition, should firstly make a choice, whether he is going to use microtones as a decorative tool or as a structural element. I tend to choose the latter, so in this article, I present five different approaches to microtonal melody in structural level.

The result of the compositional approach and technical means depends on which particular type of linear model is applied. Basically, these models were not derived theoretically, but rather developed on practical experimenting with different compositional means applied on microtonal material. So it is based on my experience and represent various decisions that were required working on compositions with different ideas and practical circumstances, like a collection of instruments in the ensemble, vocal or instrumental performance, possible mixing with electronics, or finally writing for computer-controlled instruments.

### 1. The roots of my microtonal music

I used microtones the first time more than 20 years ago, in the composition "Tranquility" for vocal ensemble, written in 1992. The piece was written as a four part vocal canon. A single note, repeated many times in ascending and descending course, creates extended 'glissandi', with gradual quartertone steps. Yet another idea connected with poetic text from Vergilius (*par levibus ventis, volucrique simillima somno*) – the sound (voice or a flute in the version produced by Italian flutist Manuel Zurria) appears first at the beginning of each note, but for the decay there is just a breathing of air remained.

Starting with "Tranquility" I often deal with microintervals in different approaches, but the main principle, subdivision of the octave or tempered semitone into equal parts, remains. Whereas this principle might look quite artificial, it is also typical for some ethnic cultures, such as Javanese traditional music with the Slendro system. Some other contemporary composers also use similar concept of equal subdivision, such as Silvia Fomina (equipentatonic and equiheptatonic scales), Paweł Mykietyń (harmonic quartertone system), etc.

### 2. Five categories of microtonal melodic models

According to my experience, there are five main categories of microtonal melodic models. I am going to discuss each of them separately, together with five compositions where those structures were generated.

#### 2.1. Motif-based structure

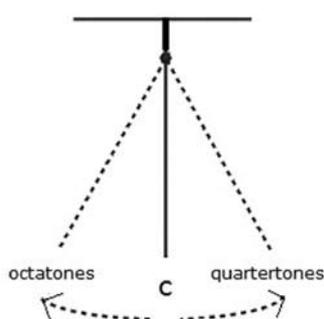
The first model is a motif-based structure. It is related with traditional melodic patterns and is perceived as a conventional linear motion despite of unusual microtonal alterations. As example, I would like to show an excerpt from the vocal canon "Sybilla", written in 1996. (Ex. 1)



As the musicologist Gražina Daunoravičienė mentioned, “*Sybilla* (text by Petronius) for mixed choir or 12 voices, was composed for the *Gaida Festival*. A fragment from the *Satyricon* by Petronius intrigued the composer with its meanings, expressing the cruel absurdity of a feast scene. *Sybilla*, an endless canon moving in round, like Mažulis’ other spiral canons, was drafted on a one-page score. The initial motif of this canon, a pattern that microtonally envelops the central tone, offered the composer a model for its development: the motif is transposed in a sequence upwards and downwards from the tones of a ‘white-key’ diatonic scale. By using the consistent timbral progression (female, mixed, and male voices) Mažulis shapes a palindrome of variable density.”<sup>1</sup>

## 2.2. Pendulum motion

The second model, pendulum motion of melodic line, may be illustrated with the computer music piece “Palindrome”, produced in 1996 (Ex. 3). The melody was created as a pendulum, starting with the central tone, and swinging to the left and right. The amplitude constantly increases and gradually covers the octatone and quartertone scales. Therefore, the single melody encompasses both scales, which permanently alternate each other. In the process of composition, after the melody was created, the second step was to construct polyphonic texture, applying the canon technique. The symmetrical concentric form corresponds to the palindrome structure, and the piece may be performed in a retrograde motion without any changes, getting the same result.



Example 3

## 2.3. Microphonic contour

The third model concerns the microphonic contour, which includes hardly comprehensible changes of small microintervals. In some of my compositions there are very small intervals exposed, for example in “Schisma” for cello and electronics (2007) we find different intervals from 2.04 cents to 4.16 cents; and in “Form is Emptiness” – 3.33 cents. The composition that I would like to offer now is “*Talita cumi*”, where a semitone is divided into 30 parts and the resulting intervals are also of the same size that is, 3.33 cents.

Regarding the perception of this music, musicologist Helga de la Motte wrote: “Music to Rytis Mažulis also means a symbol which rests beyond its concrete shape of a sound structures. Here the magic of composition owns its birth to the conversion of an abstract image into a concrete sound result. The listener seems to be given a chance to decide whether to immerse himself into a meditative contemplation or to focus attention and to follow a subtle change of microintervals. Having chosen the latter way, he will discover with astonishment how hardly noticeable intervals, which seemed to be not felt by the ear – just a noticeable difference – become clear and heard. Thanks to the spell of music, he will experience his own changing perception together with music.”<sup>2</sup>

The term “microphonic” refers to Gerard Grisey when he talked on the liminality of music considering the sound phenomena that comes closer to the boundaries of the perception.<sup>3</sup> There are also scientific terms that refer to the smallest changes of the pitches a person is able to detect. According to Donald Hodges, the

<sup>1</sup> Daunoravičienė, G. (2003). Sound architecture of Rytis Mažulis’ microstructural canons (from 100 to 3,448275862 cents). In: *Menotyra / Studies in Art*, No. 1.

<sup>2</sup> De la Motte, H. (1999). *Talita cumi: the Audible in the Inaudible*, booklet of CD Rytis Mažulis *Talita cumi*, Lithuanian Music Information and Publishing Centre, Akademie Schloss Solitude.

<sup>3</sup> Rose, F. (1996). Introduction to the Pitch Organization of French Spectral Music. In: *Perspectives of New Music*, Vol. 34, No. 2 (Summer), p. 6–39.

Just Noticeable Difference (JND) can be from 0.5 to 4 Hz, depending on the frequency level.<sup>4</sup> For me it is important that a melody composed in such a scale may be considered as a linear phenomenon, and to be perceived as a succession of different individual pitches. Nevertheless, it depends on a listener’s approach and ability to follow the micro-events.

### 2.4. Gliding notes

The next model is a gliding notes technique. It is based on the application of extended *glissando* passages for the whole composition, in which the *glissando* gestures are not decorative, but strictly structuralized elements. As an example let us analyze the excerpt of my composition “*ajapajapam*”, written in 2002 (Ex. 4).

*To Latvian Radio Chamber Singers and Chorus Quartet*  
**ajapajapam**  
Rytis Marulis (2002)

Example 4. *ajapajapam*

The idea was to create a melodic *glissando* pattern, and to extend it in time, until the duration of around 35 minutes is reached. The result is an extremely slow and static process, when the melody descends, covering an interval of a minor sixth. However, the downward movement is hardly noticeable because of the extremely slow tempo. The polyphonic texture consists of six structural lines. The intervals of time among them produces a canon, with constant delay, which results in overlapping of the *glissandi* patterns. The harmonic parameter is very important for the listener, because the microchromatic clusters permanently rotate and generate various sound spectra.

The linear process in this composition cannot be perceived as a row of different or individual intervals. It is rather an endless note, which multiplies into the polyphonic layers of sounds.

### 2.5. Resulting patterns

The last model of microtonal linearity represents the resulting patterns. They occur in cases when the melodic pattern is not ‘composed’ as a line, but results from the interaction of various structural parameters, such as pitches, rhythm, harmony, and texture. For example, in the composition for chamber ensemble “*Canon mensurabilis*”, written in 2000 (Ex. 5), the quartertone rows were applied with different forms of transpositions and interversions. The serial procedures were also adapted to the organization of rhythm. The successions of different durations, or mensurations were presented in different parts, following the proportions of 6 : 5 : 4 : 3 : 2 : 3 and so on. The application of quasi-serial technical means, together with the constant

<sup>4</sup> Hodges, D., & Sebald, D. (2011). *Music in the Human Experience. An Introduction to Music Psychology*. New York and London: Routledge. Taylor & Francis Group, p. 117.

crossing of parts in the similar register, results in an “artificial” linearity. There is a pseudo-melody, which was not created intentionally. It is a result of the whole complex of structural factors.

Canon Mensurabilis  
*To Ensemble Court-Circuit*

Rytis Mažulis  
2006

The image displays a musical score for the piece "Canon Mensurabilis" by Rytis Mažulis. The score is arranged in three systems. The first system includes parts for Flute, Clarinet in Bb, Violin, Viola, Violoncello, and Piano. The second system includes parts for Flute, Clarinet in Bb, Violin, Viola, Violoncello, and Percussion. The third system includes parts for Flute, Clarinet in Bb, Violin, Viola, Violoncello, and Percussion. The Piano part is highly rhythmic and complex, featuring many sixteenth and thirty-second notes. The other instruments play more melodic and harmonic lines. The score is in 2/4 time and includes dynamic markings such as *pp* and *legato*.

Example 5. *Canon mensurabilis*

## Conclusions

In conclusion, I would like to add that the final result of microtonal composition strongly depends on purely practical moments, like instrumentation. If we write for strings, woodwinds or singers, in general, for the instruments with the natural tuning, we could not expect the total accuracy of microtones. Even strictly calculated and structured material may sound as falsely intonated pitches. Therefore, the result may be negative. In this case more reasonable solution is to pay more attention to sound colors, polyphonic textures and sound layers.

However, if it is important to get a clearly audible result of individual pitches, we should choose the instruments of fixed tuning, such as piano which might be retuned, like in “Canon mensurabilis”, or “Canon fluxus” (2008), as well as harpsichord (“Monad”, 2006), or synthesizer (“Talita cumi”).

Trying to synthesize both approaches, I used to duplicate the material, which is performed by “human beings” with an electronic/computer part, which presents the same sound material. In this case, it performs the microstructures precisely. On the other hand, live musicians perform approximately, but they give some live spirit to the performance.

Finally, because almost all of my compositions are canons of various kinds, so there is always a basic principle: to derive everything from a single melody. (As the Latin *regula* says, *ex uno segmento totem operem deducere*<sup>5</sup> [to derive all piece from one segment].) Therefore, for me it is very important to create a melody. That is the first, initial step in my process of composition.

<sup>5</sup> The Latin quote was invented by musicologist Jonas Vilimas, during his presentation at the musicological conference in Druskininkai, 1994 (“Chamber Music Days by Young Composers”).

## References

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## Mikrotoninės melodijos kūrimas

### Santrauka

Tyrinėjant mikrotoninę muziką reikėtų atsižvelgti į keletą melodijos komponavimo aspektų. Kompozicinis sprendimas ir techninės priemonės priklauso nuo pasirinkto linearaus modelio. Mikrotonines melodijas galima suskirstyti į 5 pagrindines kategorijas: motyvines struktūras (susijusias su tradiciniais melodiniais piešiniais); švytuoklinį melodinės linijos judėjimą (beveik nesuvokiamą mažiausių intervalų kaitą); glisanduojančių natų techniką (pagrįstą išplėstų *glissando* epizodų vartojimu visame kūrinėje, kuriame *glissando* figūros yra ne dekoratyvus, o griežtai struktūruotas elementas); rezultatyvinius pavidalus (susidarancius tais atvejais, kai melodinis piešinys nėra sukurtas lineariai, bet susiformuoja veikiamas skirtingų struktūrinių parametru). Visi šie modeliai iliustruojami mano vokalinių ir instrumentinių kūrinių: „Sybilla“, „Palindromas“, „Talita cumi“, „ajapajapam“, „Canon mensurabilis“.

## Locating the Melodic within Pre-Compositional Frameworks

### Annotation

For composers using algorithms, “found” materials, or any otherwise predetermined patterns of harmonic or temporal organisation in their pre-compositional planning and subsequent working process, the composition of strictly melodic material can often resemble a sort of archaeological endeavour, as potential melodic or proto-melodic structures are gradually uncovered during the exploration of pre-existing compositional frameworks. These “discovered” structures of interest may later be highlighted or otherwise further manipulated for use as melodic or primary thematic material in the finished work. This seemingly straightforward process of assigning melodic status to specific found materials (often with little or no additional alterations) is intimately related to fundamental questions surrounding the ways in which composers frame their core conceptions of melodic possibility, in addition to how we as listeners may impose our personal and cultural melodic conceptions upon “non-musical” everyday sonic experiences. Crucially, it raises additional issues surrounding the interrelationship between the rhythmic and harmonic structures in composed melodies and thematic material, and why their fundamental parameters, duration and pitch, can be so difficult to disentangle. This paper will examine these issues from a personal perspective, illustrating various processes of “revealing” latent melodic and thematic content in the pre-compositional patterns of my recent work. Further, it will seek to illuminate the potentially complex network of underlying motional forces created between the two layers of my harmonic and temporal pre-compositional frameworks, and investigate how they themselves may have a role to play in the subsequent location of melodic and primary thematic material in the creative moment.

**Keywords:** algorithmic composition, harmonic permutation, perceptual grouping, long-range polyrhythms, pareidolia.

### 1. Pre-compositional frameworks, perceptual organization and *pareidolia*

This paper represents an initial investigation into the fascinating (and often confounding) relationships that obtain between certain types of *pre-compositional frameworks* and finished musical textures. We can define a pre-compositional framework as any sort of “found” material that the composer subsequently crafts (or, in some cases, simply *frames*) through the compositional process. In keeping with the theme of this conference, today we will focus our gaze on how *melodic* material can be created by working in this manner, in addition to various thematic features that may contribute to the perception of musical material as being melodic, such as melodic contour (Schmuckler 2009). We will mainly focus on material from three of my recent pieces as illustrative examples, applying particular emphasis on certain sections of the works, which feature varying types of melodic content that was developed directly through the creative interaction with a chosen pre-compositional framework. In addition, we will attempt to generalise these observations in order to situate them within a larger sphere of music practice, as well as within the broader scope of other disciplines, such as the visual arts.

As many composers who work with pre-compositional frameworks will know, the question as to whether pre-compositional structures are actually “found” (as in the case of the star charts which were used by John Cage to construct *Etudes Australes*) or whether they have been created by the composer themselves can often be immaterial, as both types of structure may often result in similar working methods, with the composer simply responding directly to the pre-compositional framework throughout the creative process. In my own recent practice, the creation of such frameworks has typically been done using layered rhythmic networks, patterns of harmonic or duration order permutation, polyrhythmic divisions of the temporal space, or various superposed combinations of these. Though these pre-compositional structures have always been fully designed by the composer (myself, in this case), we can still think of them in some ways as being “random” or “found” in the sense that the *interactions of the unfolding parallel processes* are sufficiently complex to ensure that potential musical outcomes cannot be fully known in advance. To be clear: what we are interested in here are not simply finished musical textures, which are created by direct mappings or other familiar algorithmic techniques (Doornbusch 2002: 145–156), but rather the detailed exploration of these pre-compositional frameworks, where the composer is (consciously or unconsciously) trying to locate material or patterns of interest, thus *perceptually grouping selections* of these elements in potentially meaningful ways in the creative moment.<sup>1</sup> Before we begin

<sup>1</sup> See Doornbusch (2002: 145–156) for more information on composers’ attitudes to pre-compositional planning and more or less strictly-interpreted algorithmic formulae. I have spoken to many composers to whom this idea of ‘fiddling’ with a strict background framework (whatever this might constitute in individual cases) is anathema. I remember asking one such composer if he felt free to ‘compose around’ the time points in his background structure, starting a bit earlier or later than was scheduled in the formal plan, as the needs of the music dictated. “Oh no, never; because otherwise this [gesturing at a sketch of the formal plan] is meaningless.” Of course, there are other ways to think about the expression of background structure. To take certain works of visual art as an example: experience tells us that we may observe a ‘hidden’ ordering of certain elements, which may be comprised of geometric shapes, strong lines, or any number of other organizing forms that live in the background, giving structure to

to examine how I have responded to my pre-compositional material during the creative process, I believe it may be of value to bring in the well-known psychological phenomenon of *pareidolia*. This term denotes the natural human propensity for perceiving meaningful patterns in complex sensory information where none may actually exist. From an artistic perspective, pareidolia has been recognized as a powerful creative tool at least as far back as Leonardo da Vinci, who included this description of the phenomenon in the collection of writings that later became known as his *Treatise on Painting* (published posthumously in 1651):

“I shall not refrain from including among these precepts a new aid to contemplation, which, although seemingly trivial and almost ridiculous, is nonetheless of great utility in arousing the mind to various inventions. And this is, if you look at any walls soiled with a variety of stains, or stones with variegated patterns, when you have to invent some location, you will therein be able to see a resemblance to various landscapes graced with mountains, rivers, rocks, trees, plains, great valleys and hills in many combinations. Or again you will be able to see various battles and figures darting about, strange-looking faces and costumes, and an endless number of things *which you can distil into finely-rendered forms* [my emphasis]. And what happens with regard to such walls and variegated stones are just as with the sound of bells, in whose peal you can find any name or word you care to imagine.” (Kemp and Walker, 1989: 222)

We can easily imagine that, for the composer in the midst of the creation of a new work, pareidolia may inevitably occur in a variety of ways both auditory and visual, as the composer integrates and groups selections of the complex relationships presented in the pre-compositional material. To set the scene in terms of my own music practice, let us briefly examine my approach to the construction of pre-compositional frameworks in detail.

## 2. Creating pre-compositional frameworks

If we repeatedly subject a collection of pitch sets to some order permutation operation (see Fig. 1) we can create long “fields” of harmonic raw material in a manner similar to what Messiaen referred to as the “Intervention of Notes”<sup>2</sup> in his classic *Technique de mon langage musical*. Although in this chapter Messiaen was primarily concerned with the use of permutation as a generator of melodic development the harmonic fields, which we construct by subjecting a *collection of pitch sets* to a similar operation takes this idea a step further.



Figure 1. Two permutations of the collection (1, 2, 3, 4, 5) create a new harmonic ‘field’

These resultant fields represent complex patterns of harmonic interrelationships; intricate networks of intervallic tension and release which can then be composed in some way into the structure of a finished work. In a similar way, my work with polyrhythmic space can be viewed as the temporal analogue to the permuted ‘harmonic fields’ just shown, in that they create complex patterns of *durational* interrelationships through a section of music; intricate networks of temporal tension and release (see Fig. 2). Again, it is the composer’s task to uncover the interesting “hidden” potentialities latent in these simultaneously-unfolding harmonic and temporal structures. By working within a polyrhythmically-divided temporal canvas I have gradually become aware of how the very act of composing with two or three layers of discrete pulse streams – streams which can often affect one another locally in, at times, quite unexpected ways – can produce a very unique and often unpredictable sense of forward motion, one that is naturally reflected in the more complex local and global temporal relationships between the elements of the polyrhythmic limbs.<sup>3</sup>

the foreground elements. Certainly these background shapes are as ‘present’ in the overall affect as the elements in a painting’s foreground, though they need not be *precisely* delineated by the foreground. Rather, they are hinted at; used to provide general structural underpinning for the whole. It follows that the background temporal structure of a composition need not necessarily rely on the *absolute* delineation of each structural/formal time point by the foreground material, and that the composer should feel free to sharpen or weaken the listener’s perception of any underlying structures as she sees fit.

<sup>2</sup> The French term “intervention” can serviceably be translated as “reversal”, which, in the context of his example, we can take to mean a sort of “order permutation”. Messiaen (1944/1956: 35).

<sup>3</sup> In a discussion of his Etudes for Piano, Ligeti refers to low-integer polyrhythms: ‘The ratio 5:3 is of course mathematically simple, but perceptually very complex. We do not count the pulses but rather experience two qualitatively different tempo levels.’ Ligeti (1988: 5–6).



Figure 2. The 35-bar and 15-bar formats of the polyrhythm 21:25, as used in *Border Sea*

To illustrate how these pre-compositional frameworks have been used in my own practice, consider the example (Fig. 3) taken from the opening of my piece *Border Sea* (2013) for flute, viola and piano. From the standpoint of temporal architecture, the piece was composed around a polyrhythmic structure of 21:25, which operates in the background as a medium-range formal determinant. Notice that the opening of the piece actually corresponds with Bar 15 of the structural polyrhythm, where an interesting maximally-out-of-phase gesture occurs just before its mid-point. In this example, the music almost completely articulates the highest level of the polyrhythmic background; that is to say, the “background” polyrhythmic structure simply *becomes the local rhythmic structure*. From a melodic standpoint, the pitches in this opening section derive from an ongoing order permutation pattern based on five chords that unfold in parallel with the polyrhythmic pattern. During composition, individual pitches were selected from this unfolding harmonic stream to create the characteristic opening.

Figure 3. Opening bars of *Border Sea*

Now we arrive at the question which is so difficult to fully address: having established parallel harmonic and temporal frameworks, how does the composer locate and develop the strongest material which is, after all, already present in some latent form in the overlapping background patterns of time and tone? From a composer’s perspective, the most typical response to this question would likely reference some process of improvisation, experimentation, or “trial and error” that, while undoubtedly correct, does not actually tell us very much about what is happening in the creative moment. It is here that I would like to bring the cognitive phenomenon of pareidolia back into the picture, as I believe that viewing this improvisatory process from the standpoint of an *ongoing pareidolic interaction* with the material can tell us more about how we extract musical forms from the “uncarved block” of our pre-compositional structure. As I began to compose *Border Sea*, I remember first

noticing the interesting out-of-phase section at Bar 15 of the polyrhythmic structure, and decided to begin the piece from that point. Choosing the major seventh interval for the piano as the first gesture, I through-composed the first ten bars, keeping the rhythms of the background structure in the front of my mind a few beats at a time, choosing pitches from the unfolding harmony pattern. Working in this way, I had the very real sensation of gradually feeling my way through an unfamiliar landscape, picking out certain forms from countless other rejected possibilities to finally arrive at a beautiful, unexpected opening melodic gesture. For me, this process of uncovering pre-existing or latent material bears a strong resemblance to da Vinci's observation of "walls soiled with a variety of stains", in that one is simultaneously *observing and inventing* – taking some form of pre-existing material, assigning it melodic status, and then "distilling it into finely-rendered forms", to use Leonardo's phrase. I believe it is important to bear in mind that these distillations are not auditory or visual illusions; we are not hearing or seeing things, which *are not actually there*. Rather, they are *spontaneous perceptual organisations* of stimuli that very much *do exist*, and we are making on-the-spot creative orderings of more-or-less random sensory information into meaningful musical gestures. This sort of "creative listening" can be as engaging for listeners as it is for the composer, as the listener becomes intimately involved with the unfolding work through their own *active* ongoing perceptual organisations of the material. It is clear that the process of composing the melodic opening of *Border Sea* as just described is in strong contrast with composing melody (or any musical gesture) within frameworks which we have already internalised to a high degree, such as the traditional tonal harmony that many of us will have assimilated from childhood, and subsequently learnt more-or-less rigorously during our formal musical training. In the opening ten bars of *Border Sea*, the pre-compositional framework was almost completely distilled into a single melodic line, which is articulated in turns by the three players. Our next example shows another approach, with the completed musical surface left to be considerably more complex, thus allowing a measure of *ongoing pareidolic interaction* with the end listener.

### 3. Creating textures which lend themselves to pareidolic hearings

At the beginning of Part II of my recently-completed orchestral work *Perfect Information* (2015), cascading figures from the preceding section yield to a quiet restatement of the main harmonic field by the strings, utilising a much finer, more granular shattering of the rhythmic surface. During the compositional process, I came to refer to these intricate rhythms as *decimation patterns*, as the initial conception of the texture in these sections was of some pre-existing material, which had been somehow "decimated" or shot through with irregular silences, interfering with the original continuity of the harmonic movement.

These decimation patterns (used almost constantly from Bar 148 to the end of the work) were composed intuitively, using a roughly four-bar cyclical structure to define eight layers of intricate rhythmic surface.

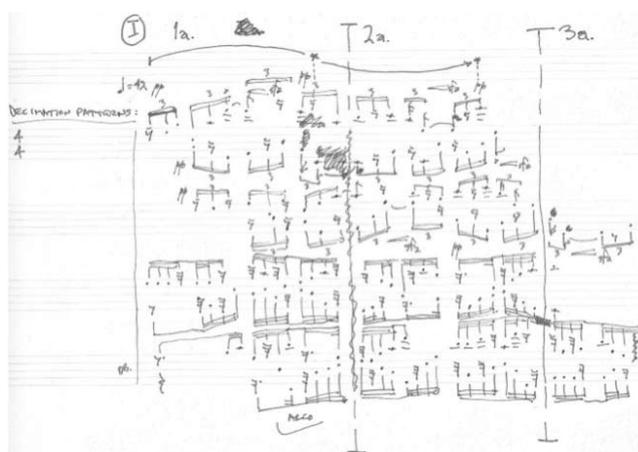


Figure 4. Sketch page showing the 'decimation patterns' used in the second half of *Perfect Information*

The sketch page shown in Fig. 4 shows the precise construction of the rhythmic texture, but this sketch was only intended to hint at general melodic curves, as the final pitch information would be distributed through the texture only during composition, again following the unfolding background harmonic permutation field.

This particular approach differs from that which we saw in *Border Sea*, in that the interest for me here was in how a more or less random distribution of the constituent pitch elements could, through their own individual melodic movements, create a fantastic sense of hyper-polyphony. As the strings, and subsequently the woodwinds, weave this complex melodic texture, the sense of a kind of melodic tangle is heightened by the use of occasional dynamic swells, which briefly rise above the cacophony and establish their own melodic profile that rises above and penetrates through the entire ensemble. Again, in contrast to *Border Sea*, it is actually *the listener* who is presented here with a dense amount of potentially melodic musical information that they must perceptually organise in their own individual ways.

Taking the general idea of the encoding and decoding of written text as a starting point, *YAMAHA/ENIGMA*, for disklavier and electronics (2011), utilizes several classic techniques from the world of codes and cryptography and sets them in motion over 14 minutes. The music of *YAMAHA/ENIGMA* is built upon three discrete, yet interacting layers of activity:

1. Order permutations of a 5-by-6 collection of pitch sets, iterated in various ways by the Disklavier.
2. A pre-recorded soundtrack edited together by hand, splicing 600 short tape fragments into 120 duration-permutational segments.
3. A voice layer, tied at various stages to the piano, soundtrack, or an algorithmic process of the computer.

In Section 1 of the piece, as well as in other sections where the piano material occurs, the harmony permutations were intentionally left to be quite ‘mechanical’ sounding, with no variation in register, dynamics, or tempo. The soundtrack was constructed from a recording of a free improvisation recorded earlier in 2011 with Milana Zaric (harp), Miguelangel Clerc (guitar), Mei-Yi Lee (percussion), Igor Maia (mixing desk), and Chad Langford (electric double bass). This digital recording was edited to 14 minutes, transferred to ¼-inch tape, and then segmented by hand following the convention shown in Figure 5. The length of the piece as a whole is determined by the cycle duration of this duration set (the set [1, 2, 3, 4, 5] shown in Fig. 5). Each permutational cycle lasts 7 seconds, resulting in a combinatorially-complete performance lasting 14 minutes.

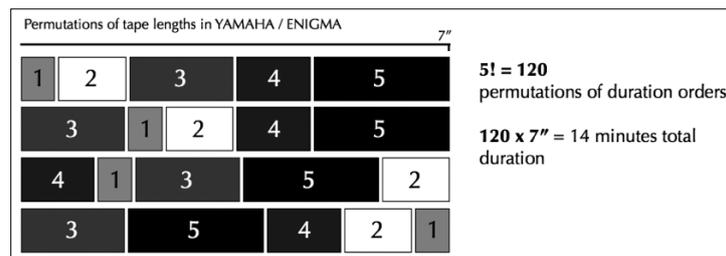


Figure 5. Duration permutations used for the tape soundtrack in *YAMAHA/ENIGMA*

This example is likely the most extreme, in the sense that the texture of the opening section was intentionally designed to create such a dense multi-temporal atmosphere that most casual listeners to the work would not consider the opening section to be melodic at all. One could certainly argue that to be the case as the music, rich in layered references and overlapping types of highly-contrasting sound material, seems to have been shattered in some way, creating a sense of “tuning in” to several different information streams simultaneously. Surpassing what Cohen (2005) terms “optimum complexity”, the density of the texture requires the listener to continually scan the various layers for meaningful relationships whilst the music is unfolding. I reference this piece here as the music does have, to my ear, an extremely strong atmosphere of *melodic potency*, as fragmentary and undeveloped as the whole may appear on first hearing. In a certain sense, this is the composer creating a complex pre-compositional framework and simply presenting it to the listener, with the pre-compositional structure intentionally designed to be a vehicle for pareidolic listening. The main feature that contributes to this effect is the equal weight generally given to each layer of material throughout the section. Typically, none of these layers is highlighted or otherwise pushed into the foreground in any way, creating a real sense of discrete, parallel processes (perhaps unrelated) that are being simultaneously observed. Despite this, there is actually a high degree of interpenetration between layers, blurring the lines somewhat as to which “instrument” is playing what. The transient melodic fragments that emerge from the complete auditory scene quite spontaneously, formed by bits of piano, the instrumentalists in the recorded soundtrack, and the occasional feedback created by the performer operating the mixing desk, are a product of our own cognitive groupings and associations, which we are making in real-time as the music unfolds.

#### 4. Summary and directions for further research

For composers who choose to actively manipulate or otherwise interact with their chosen pre-compositional materials during the creative process, the question as to whether the pre-compositional materials are “found” in the strictest sense, or are rather constructed by some means, can often be functionally irrelevant in terms of subsequent working methods. In most cases the composer is trying to locate material or patterns of interest, and is thus perceptually grouping selections of these elements in potentially meaningful ways in the creative moment. Given pre-compositional materials of sufficient complexity, it seems logical to assume that the psychological phenomenon of pareidolia has at least some role to play in the identification of emergent structures during composition. In addition, given that composers’ choices during this initial “uncovering” process are likely to be highly indicative of their individual aesthetics, it also seems reasonable to conclude that the process of assigning *melodic* status to certain of these uncovered materials can often represent the most critical working-out of this approach, as the chosen melodic material will be, by definition, asked to occupy pride of place within the musical texture and may indeed serve as a primary cognitive focal point for the work. Put simply: for composers who place value on melody and who consider their work to be “overtly melodic” in some way, the manner in which they locate and refine pre-compositional materials which they perceive to be potentially melodic reflects most intimately not only the composer’s individual conception of *melodic possibility*, but also their deeper aesthetic predilections. Just as we recognise the existence of certain types of visual textures which are more or less given to pareidolic effect (perhaps depending on the distribution and morphology of the “random” shapes and patterns manifest in the texture), we recognise that there are likely to be concrete approaches to the creation of audio textures that lend themselves to pareidolic listening.

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### Melodinės medžiagos lokalizacija prekompozicinėse struktūrose

#### Santrauka

Kompozitoriams, kurie prekompoziciniame darbo planavimo etape (o neretai ir vėlesniuose kūrybos etapuose) pasitelkia algoritmus, „susirankiotą“ medžiagą ar dar kokius nors gatavus harmoninius bei ritminius darinius, melodinės medžiagos komponavimas primena archeologinius kasinėjimus, mat potencialios melodinės ar protomelodinės struktūros atsidengia laipsniškai, ieškant galimų panaudoti kompozicinių struktūrų. Darbo eigoje „atrasos“ ir kompozitorių sudominusios struktūros vėliau gali būti išryškinamos ar įvairiai transformuojamos kaip melodinė ar pagrindinė užbaigto kūrinio teminė medžiaga. Tuo atveju, kai prekompozicinė medžiaga gana sudėtinga, atrodytų logiška prielaida, kad identifikuojant komponavimo procese ryškėjančias struktūras tam tikras vaidmuo tenka *pareidolijos* reiškiniui. Negana to, ypač turint omenyje, jog kompozitorių pasirinkimus šioje pirminės atrankos stadijoje veikiausiai nulemia jų individuali estetika, galima daryti išvadą, kad *melodijos* statuso suteikimas tam tikrai atrastai medžiagai dažniausiai parodo patį kritiškiausią tokio metodo taikymo atvejį, nes pasirinktai melodinei medžiagai pagal apibrėžimą skiriama garbingiausia vieta visoje muzikinėje faktūroje, ji gali tapti vienu svarbiausių kūrinio kognityvinių centrų. Paprasčiau tariant, jeigu kompozitoriai suteikia ypatingą reikšmę melodikai ir savo kūrinuose vienaip ar kitaip pabrėžia „akivaizdų melodiškumą“, būdas, kuriuo jie aptinka ir išgrynina prekompozicinę medžiagą, galinčią tapti melodine, ryškiausiai atspindi ne tik tai, kaip jis individualiai suvokia *melodikos galimybę*, bet ir gilesnes jo estetiškes nuostatas.

Straipsnyje šie klausimai nagrinėjami remiantis asmenine patirtimi ir iliustruojami pavyzdžiais iš naujausių autoriaus kūrinių, siekiant parodyti, kaip pasitelkus įvairius procesus „aptinkamas“ prekompoziciniuose dariniuose slypintis melodinis ir teminis turinys. Taip pat siekiama atskleisti galimą sudėtingą kompozicinius procesus grindžiančių traukos jėgų tinklą, susidarantį tarp dviejų prekompozicinės sąrangos lygmenų – harmoninių ir laiko struktūrų, ir patyrinti, kokį vaidmenį šios struktūros atlieka lokalizuojant melodinę ir pagrindinę teminę medžiagą kūrybinio akto metu.

## Canons of Melodic Punctuation in the Works of Lithuanian Composers

### Annotation

Melodic punctuation and its relation with rhythmic and harmonic parallelism stand as continuous essence of the sound map of Western European romantic aesthetics which impacts the creative processes of present-day music too. Through the syntax of musical components' (motif, phrase and so on) individual or recurrent and predictive sounding result appears. The individual solutions of melodic punctuation are determined by conscious and compositionally consistent selection of distant epochs and/or current – atonal musical structures.

**Keywords:** punctuation, syntax, caesura, cadence.

If we were to apply the linguistic understanding of punctuation (Latin *punctuatio* < *punctum* – a point)<sup>1</sup> to music, we might speak of punctuation in the general sense, reflecting not only a dividing element of sound itself in musical pieces – such as phrases<sup>2</sup>, motifs, etc. – but also as a diving element of changing emotional states (tension–release), as well as an element used in order to highlight a narrative of a piece or its parts (continuation–completion). Punctuation is perceived as a standardized syntactic and structural elements, sequences that are created with words (in language) on a tonal or atonal basis (in music). The sequences of language and melody are based on combining elements or structures (a sound, a sequence of several sounds, a sequence of many sounds, etc.)<sup>3</sup>. If language is a kind of expression of a conceptual and structural reference that is based on the pairing of nouns and verbs (“who did it”, “did it to whom”, etc.) and clearly or seemingly clearly described meanings in pieces of a metaphorical nature, then musical sounds combined with vocal musical content provide additional predications, thereby giving a piece a new semantic dimension or structural change. But in vocal music, the basic elements of punctuation are more in line with literary text rather than separated, this way emphasising the narrative of a piece as the whole (there are examples of absence of narrative; pieces of more conceptual examples of contemporary music where text does not function as a dominant element of meaning but rather as a new source of timbre, e.g. *Melika*, *Cantus Magnificat* by Julius Juzeliūnas<sup>4</sup>) and the compositional expression of a structural idea (e.g. *There Are Numerous Stars in the Sky* by Jonas Jurkūnas<sup>5</sup>).

Example 1. Julius Juzeliūnas. *Melika* (1973) for soprano and organ. Part II “Judabra”, fragment  
(Example from the Music Information Centre Lithuania database)

However, in instrumental music predication is much more related to a freer content or, to be more precise, prediction/foresight about the content, which determines more liberal structural forms of complete phrases, sentences, or parts of bigger forms. Therefore in this paper, examples of instrumental music were more of a choice. Comparative analysis (music–language) may reveal interesting moments about the functional architecture of both fields (music and language), similarities, which began to receive more intense analytical attention from the year 2000<sup>6</sup>.

<sup>1</sup> *Tarptautinių žodžių žodynas*, Vilnius, 2001, p. 618. Retrieved from: <http://www.zodynas.lt/tarptautinis-zodziu-zodynas> [2015-08-02].

<sup>2</sup> Glenn Spring, Jere Hutcheson. *Musical Form and Analysis: Time, Pattern, Proportion*, McGraw-Hill Education, 1995, p. 48.

<sup>3</sup> Sandra P. Rosenblum. *Performance Practices in Classic Piano Music (Music: Scholarship and Performance)*, Indiana University Press, Paperback – November 22, 1988, p. 9.

<sup>4</sup> Gaidamavičiūtė, R. Muzikos ir teksto jungčių prasminė bei funkcinė įvairovė XX a. II pusės lietuvių kompozitorių kūryboje. *Menotyra*, 2004, Nr. 1 (34), p. 26.

<sup>5</sup> The vocal text is a series of numbers. [*Auth. note*].

<sup>6</sup> Patel, A., Gibson, E., Ratner, J., Besson, M., & Holcomb, P. (1998). Processing syntactic relations in language and music: An event-related potential study. *Journal of Cognitive Neuroscience*, 10, 717–733.

The punctuation of a melody and its relation with the parallels of rhythm and harmony are a continuous presence of the Western European map of romantic aesthetics<sup>7</sup> that still affects the creative processes of the present day. Elements of musical syntax (motif, phrase, etc.) create individual or repetitive and predictable results of sound. The latter are illustrated by symmetrical solutions of melodic syntax and traditional usage of caesurae that reflect the directions of canons and traditions<sup>8</sup>. Such examples are abundant in both: works of romantic post-war composers and modern works of Julius Juzeliūnas, Eduardas Balsys and Vytautas Barkauskas. The individual punctuation of a melody is determined by the conscious and compositionally consistent selection of atonal musical structures of past and/or the present.

The caesura is a part of fundamental and normative classical syntax; it perfectly demonstrates the main difference in punctuation between music and language. In the classical meaning, caesura has a linguistic character because of its punctuation, periodicity and convenience. However, the level of “emanation” is different in music, where the caesura is viewed as both form and content at the same time. And this is not characteristic of prose (perhaps even poetry) because the caesura is a phonetic, syntactic and semantic *recreational*, breathing space. In classical music the perception of it is more fragmented. Holderlin stated the multi-functionalism of caesura: it covers everything from the poetic to the dramatic, especially in the philosophical category. Such multi-functionalism is imminent in music. From a philosophical perspective, Holderlin’s<sup>9</sup> attitude towards the caesura enables him to break free from its empirical nature (the caesura as a disruption of continuation, as believed by Meyer<sup>10</sup> and Narmour<sup>11</sup>). Modern theory states that the caesura is a kind of artificially created dismantler of music. From the perspective of punctuation evolution in literature, Adorn sees it as not only an element of style or fashion<sup>12</sup>, but of a culture as well. Such parallelism can be applied to contemporary examples of modern music, where atypical notational presentation is especially significant.

The canons of melodic punctuation and a constant search for new leads code an easier or more difficult perception of interpreted textual corpus, a narrative sequence as a whole or in parts. In some cases the canons of punctuation are pronounced in examples of traditional notation, and in other cases – non-traditional. The same can be said of the tendencies to break free from the canons of melodic punctuation: there are examples of original punctuation in traditional music and pieces that have been written in special notation. The aforementioned ‘square’ of melodic punctuation, certain aspects of canon and new expression links to the musical narrative, and musical dynamism that are reflected in the work of Lithuanian composers of various generations (Antanas Rekašius, Vytautas Montvila, Algirdas Martinaitis, Nomedas Valančiūtė, etc.).

**A** Canons of melodic punctuation in traditional notation

**B** Canons of melodic punctuation in non-traditional notation

**C** Examples of original punctuation in traditional notation

**D** Examples of original punctuation in non-traditional notation

As mentioned before, the punctuation of melody in classic and romantic literature is connected to the caesura, a certain metro-rhythmical pause that exists, once again, in poetry, prose and music, and is perceived as a boundary between two musical elements. The boundary is linked to a logical interruption in music and has a more meaningful aspect than silence or a pause, and is perceived on the level of cadence. Cadence is etymologically understood as a ‘fall’ – *cado*<sup>13</sup> in Latin – and it is an important boundary of thought and possibly the melodic or harmonic completing element of a whole piece or longer parts of its form that is resolved either traditionally or canonically: the strike of a melody or chord – pause – movement. For this reason, many examples of Lithuanian music were omitted (virtually up to the beginning of the 1970s), and one of the most interesting discoveries in melodic analysis could be the rarely occurring continuous syntactic elements of

<sup>7</sup> Nietzsche R. Nietzsche, *Aesthetics and Modernity*, Cambridge University Press, 2000, p. 224.

<sup>8</sup> Spitzer M. Music as Philosophy: Adorno and Beethoven’s Late Style (Musical Meaning and Interpretation), 2006, p. 228.

<sup>9</sup> Gosetti-Ferencei J.A. Heidegger, Hölderlin, and the Subject of Poetic Language: Toward a New Poetics of Dasein, Fordham Univ. Press, 2004, p. 200.

<sup>10</sup> Meyer, L. B. 1956. Emotion and Meaning in Music. Chicago: Univ. of Chicago Press. [5–8, 10, 18, 21].

<sup>11</sup> Narmour, E. 1990. The Analysis and Cognition of Basic Melodic Structures: The Implication-Realization Model. Chicago: Univ. of Chicago Press. [8, 16].

<sup>12</sup> Popova Maria. Theodor Adorno on the Art of Punctuation. <https://www.brainpickings.org/2014/09/11/theodor-adorno-punctuation-marks/>

<sup>13</sup> The Penny Magazine of the Society for the Diffusion of Useful Knowledge, Vol. 6, 1843, edited by George Long and published by Charles Knigh, p. 99.

melody (the transition in the prelude of S. Vainiūnas' Concerto No. 4; when the last sound of the first part becomes the first of the next). Therefore an interesting endeavour may be to take a more profound view at the most significant trends in melodic punctuation and how they are reflected in later works of professional Lithuanian music an interesting endeavour.

**II**

Example 2. Stasys Vainiūnas. *Piano concert No 4* (1975) for piano and string orchestra. II part fragment (Example from published piano scores: Leningrad: Muzyka, 1977)

Vytautas Montvila's melodic punctuation is expressed by contrast. In the piano cycle, *Mirages* small punctuation bookmarks or separations are applied to smaller numbers of sound and larger separations are applied to larger numbers. The composer also sets up a contrast between various rhythmic sizes and tempos or, in the case of the *Gothic Poem*, the decrease of tempo, in *sutartinė* material (syncopation) eliminates punctuational 'hearing' (in the C category in both cases).

Example 3. Vytautas Montvila. *Gothic Poem* (1970) for symphonic orchestra (44–47 bars) (Example from published scores: Sovetskij kompozitor, 1973)

Close to Vytautas Montvilas' generation, composer Antanas Rekašius, in his piano preludes *Atonica* (1, 2, 3), and *Wind quintet No 2*, presents symmetrically arranged punctuation ideas with a clearer syntactic moments (even though cluster, pointillism and other elements of sound effects are applied). Bar lines become an expressive element of punctuation here, related to the periodical repetition of rhythmic accents (strong – weak part of bar). Punctuation moments are almost always traditional yet atonal (except for collages such as *Music*).

**ATONIKA (1970)**  
12 preliudų fortepijonui  
ANTANAS REKAŠIUS  
(1928)

Example 4. Antanas Rekašius. *Atonic* (1970) for piano, fragment  
(Example from Lithuanian Music Information and Publishing Centre, MILC 013, 1998)

Example 5. Antanas Rekašius. *Wind quintet No 2* (1976), Part I, fragment  
(Example from the Music Information Centre Lithuania database)

In Part I of Bronius Kutavičius' vocal series *On the Shore*, the melody is conjunctive. The three consonants in the line *Naktis eina gilyn ir gi-lyn, gi-lyn* create an optical illusion of punctuation, however, this moment of punctuation can become unperceived/unclear through interpretation due to the alto accentuations placed in between. Thus, the vertical sound and the moment of transition in the phrase is redrawn. This example illustrates category D. In Part IV of the same piece, a more traditional example of punctuation is predominant,

reflecting the link with combinations of chords that are held longer in tonal cadences, when a chord is used for completion (category B).

**Lento. Allo stesso modo**

Nak...tis ei...na

gi...lyn ir gi...lyn, gi...lyn. Tik...tai aš gu...liu

Example 6. Bronius Kutavičius. *On the Shore* (1972) for soprano and 4 violas, fragment (Vilnius, printed editions: Vaga, 1973)

The punctuation of *Erotics* is highlighted by separate lines of the staves where each line is equal to one longer syntactic structure. Due to the repetitive and fragmented melodic nature, the sum of the syntactic structure is equal to the phrase-sentence (as in baroque music with indivisible/non-caesurian sentence-period; category C).

I

Flauto

Corno

Allegro = 78 rubato

mp

ff

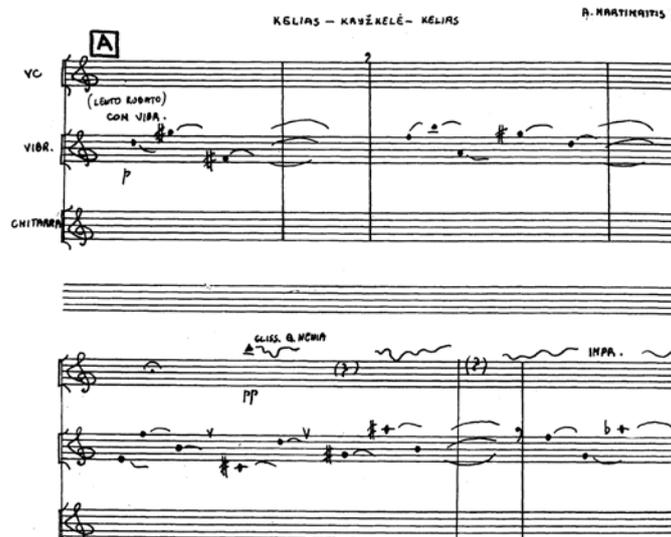
Example 7. Bronius Kutavičius. *Erotics* (1997) for recording flute, horn female voice (tape), fragment (Example from the Music Information Centre Lithuania database)

Unique examples of punctuation can be found in Bronius Kutavičius' *Last Pagan Rites* and parts II, III and IV of the *Magic Circle of Sanskrit* oratorio, which places the emphasis not on the ending, but on the renewing beginning (as the new voice joins in). Repetitive and canonical terraces create an impression of concentric dynamism and the smooth flow of transitions between parts – an original punctuation for tonally sounding flickering (category D).

With examples of each category in Bronius Kutavičius' work, we encounter symmetrical versions of structures, and the rearrangement or multiplication of sorts. Algirdas Martinaitis' works demonstrate a predominant asymmetrical arrangement of syntactical structures, which due to the metro-rhythmical change and variety of rhythmic formulas does not allow the listener to feel a consistency of punctuation. "The same and a little bit different" (category C) could serve as a summary of punctuation in the *Arma Christi* composition, and in the first brace of the second page of the manuscript, there is an example of bar-based punctuation that may often be seen in contemporary musical notation. It is these repeating sequences of chords that become the pronounced rhythmic-harmonic beats of punctuation that contrast with the downward slipping chromatic line of melody and continuous transition to B hyper-measure. Examples of modulating punctuation also exist. In the composition *Road-Crossroad-Road*, individual sounds and the aleatoric systems are modulated into traditional notational expression with its characteristic caesurae.



Example 8. Algirdas Martinaitis. *Arma Christi* (1996) for trombone, piano, double bass, marimba and siren, fragment (Example from the Music Information Centre Lithuania database)



Example 9. Algirdas Martinaitis. *Road-Crossroad-Road* (1980) for electric guitar, electric cello and percussion, fragment (Example from the Music Information Centre Lithuania database)

The works of two composers, Nomeda Valančiūtė and Loreta Narvilaitė, can be attributed to category C. The punctuation solutions of the latter author are related to modality and horizontal multi-layered writing. Thus, if excluding the structure "melody + accompaniment" and instead forming "the rising sound with a melody + melody x" structure (when one voice stops, another continues), traditional and clearly pronounced

punctuation disappear in the vertical lining of sound (*Morning Dew Was Falling*, bar 65; string quartet *The Wall*). The bookmarks of punctuation in Nomedas Valančiūtės pieces *Reflectionsnebel* (*Fragment from the Hospital Park*) in between the repeated sound formulas are created as a dynamic progression (from large structures and longer separations between increasingly smaller elements). The sensation of a consistent transition and contrast depends on the performer's interpretation, thus the sound result can be seen as similar to tradition or continual speech 'with no full stops'.

**FRAGMENT FROM THE HOSPITAL'S PARK**  
for string quartet  
(1998)

NOMEDA VALANČIŪTĖ  
(1961)

Example 10. Nomedas Valančiūtė. *Fragment from the Hospital Park* (1998) for string quartet, fragment (Example from the Lithuanian Music Information and Publishing Centre, MILC 023, 1999)

**RYTO RASA KRITO**

Loreta NARVILAITE

♩ = 72

Example 11. Loreta Narvilaitė. *Morning Dew Was Falling* (1996) for flute, violin, viola, cello, piano, fragment (Example from the Lithuanian Music Information and Publishing Centre, MILC 031, 2000)

In summary, the conclusion can be made that even though punctuation is rather linked to traditions of tonal music<sup>14</sup> and a certain accompanying background – larger rhythmic values and the simultaneous melting of a melody and chord into cadence – non-traditional examples of punctuation can be found even when avoiding the aesthetics of tonal music.

<sup>14</sup> Brown C., Norrington R. *Classical and Romantic Performing Practice, 1750–1900*. Oxford and New York: Oxford University Press, 1999, p. 139.

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## Melodijos punktuacijos kanonai lietuvių kompozitorių kūryboje

### Santrauka

Melodijos punktuacija ir jos santykis su ritmo bei harmonijos paraleliškumu – tęstinė Vakarų Europos romantinės estetikos garsinio žemėlapio esatis, veikianti ir šių dienų kūrybinius procesus. Pasitelkus muzikos sintaksės dėmenis (motyvus, frazes ir pan.) gaunamas individualus arba kartotinis bei nuspėjamas skambesio rezultatas. Pastarąjį geriausiai iliustruoja simetriniai melodijos sintaksiniai sprendimai, cezūrų šablonai, kurie reflektuoja kanono ir tradicijos kryptis. Individualius melodijos punktuacijos sprendimus lemia sąmoninga ir kompoziciškai nuosekli nutolusių epochų ir (ar) dabarties atonalių muzikinių struktūrų atranka. Melodijos punktuacijos kanonai ir naujovių siekiamybė užprogramuoja lengviau ar sunkiau suvokiamą bei interpretuojamą tekstyną, jo visumos ar atskirų dalių dramaturginę seką. Vienu atveju punktuacijos kanonai išryškėja tradicinės notacijos pavyzdžiuose, kitu atveju – netradicinės notacijos kūriniuose. Tą patį galima pasakyti ir apie išsilaisvinimo iš melodijos punktuacijos kanonų tendencijas: originalių punktuacijos pavyzdžių esama tradicine ir specialia notacija sukurtuose kūriniuose. Minėtas melodijos punktuacijos „kvadratas“, kanono ir naujos raiškos aspektai, sąsajos su muzikinės dramaturgijos visuma bei kūrinio dinamika atsispindi įvairių kartų lietuvių kompozitorių (Antano Rekašiaus, Antano Montvilos, Algirdo Martinaičio, Nomedos Valančiūtės ir kt.) kūriniuose.

**Reikšminiai žodžiai:** punktuacija, sintaksė, cezūra, kadencija.

## Exotic Sounds in the Melodic Shaping of George Crumb's Middle Period Works

### Annotation

The establishment of the integral serialism in Europe (and partly in America) during the 1950s set the fundamentals not only for a new way of thinking, but also for the development of many alternative compositional methods, mainly from those who chose not to follow the serial organisation of their musical parameters. It is a fact that in many cases, focus was put on various eastern traditions, in order to differentiate their artistic language from the European and American serialism. For Europe and America, incorporating exotic elements in a native composer's language is not a totally innovative characteristic which came up after the 1950s. More specifically, eastern sonorities have been used by numerous earlier significant composers, such as Debussy, Mahler and Verdi (during the late nineteenth and early twentieth centuries), or even earlier, by Mozart (during Classicism). Since the 1920s, Henry Cowell and his contemporaries paved the way forward to further exploration of instruments' timbral potential, incorporating many elements from various non-western cultures. A few years later, many composers established their style by introducing exotic folk modes, extending the timbre of the musical instruments or, occasionally, by using original non-western instruments. For instance, in the majority of George Crumb's works, non-western elements have been used to organise the music material and to shape the melodic lines, according to the philosophy of the culture the above elements originate from. The opening of the "Vox Balaenae" trio and the second movement of the "Black Angels" String Quartet (titled as "Vocalise" and "Sounds of Bones and Flutes" respectively) can be characterised as typical and representative examples for the incorporation of non-western folk modes in George Crumb's melodic writing. Extended instrumental techniques are often applied in order to "orchestrate" the mostly modal monophonic lines. In addition, the two "Makrokosmos" cycles for piano, "Ancient Voices of Children" for voices and ensemble, and the "Star-Child" for voices, percussion and large orchestra, reflect Crumb's identical melodic shaping, based not only on exotic music material, but also on various eastern philosophic theories, such as the archetypal circular illustration of the universe according to cultures based on Hinduism and Buddhism (Mandala).

In summary, this paper will examine the melodic language of George Crumb's middle period works and will emphasise on the organisation of the music material, while focusing on both pitch and timbre. Finally, fundamental compositional issues will be explored such as 1) the functional use of extended instrumental techniques and their crucial role in George Crumb's melodic writing, 2) the organisation and incorporation of exotic modes and philosophical theories in a Western compositional framework.

**Keywords:** melodic shaping, melodic language, pitch, timbre, non-western elements, George Crumb.

### After Romanticism

Without a doubt, the twentieth century was characterised by intense exploration of innovative compositional techniques, aiming to a determinate differentiation from the past. The exploration of new methods for shaping a melodic line had always been the focus of interest for the post-Schönberg composers' generations in Europe and the USA. Starting from the dodecaphony and the integral serialism, the construction process of melodic motives determinatively affected the development of new works. Once the traditional tonal relationships between notes and chords were vitiated, the context and the identifiability of an independent motive takes a fundamental role and it usually characterises the work itself, the composer and, sometimes, the whole artistic movement the particular piece represents. In 1950s, many fundamental compositional principles of the Baroque and the Classical period reappear and numerous composers aimed to a new perfect match between the form and the context of each work. In order to achieve an 'absolute' piece of art, there was a sort of rejection of any personalised element which possibly referred to the composer himself. Hence, composers focused on the invention of techniques which would be able to produce new structures, away from any personal or not pure musical element. At this point, it should be underlined that serialism, however supported or criticised, contributed to the creation of other, alternative styles, which attempted to break through this established compositional tradition.

### Introduction of non-western elements into contemporary composition: An innovative idea?

From the end of the nineteenth century, America appears to be a newly colonised country which tried to establish its contemporary artistic voice worldwide<sup>1</sup>. Thus, America proved to be able to give the chance to many native (and later non-native) composers to develop new styles, often not linked to any of the European traditions or stereotypes.

In the early 1920s, there was a significant movement of American composers to the local universities. Thus, the contemporary compositional approach comes across the liberal arts, such as Mathematics, Astronomy and

<sup>1</sup> Griffiths, Paul. 1978. *A Concise History of Avant-Garde Music: From Debussy to Boulez*. New York: Oxford University Press.

Philosophy. The wisdom which characterises the liberal arts affected fundamentally the compositional thinking and created new needs which brought new artistic approaches. Many of those approaches often focus on philosophical theories coming from various non-contemporary European cultures, such as Ancient Greece, Ancient Rome, India and the countries of the Far East<sup>2</sup>. At this point, the question if the incorporation of elements from non-western traditions is actually a phenomenon of the 20th century or one of earlier eras, would presumably arise. Masterpieces such as Mozart's "Alla Turca", Rimsky Korsakov's "Scheherazade", Verdi's "Aida" and "Madame Butterfly" and many others, suggest that Eastern tradition has always been attracting composers' interest in terms of extending their language by creating alternative melodic and harmonic sonorities.

For contemporary American music, Charles Ives can be considered as one of the initiators of a composers' generation which attempted to explore multiple parameters for writing music, such as tonality, bi-tonality, atonality, microtonality, aleatoric counterpoint and unconventional orchestration<sup>3</sup>. After the Second World War, the so-called Emerging American Composers Generation<sup>4</sup> including Henry Cowell, John Cage and later Morton Feldman, LaMonte Young and George Crumb, extended Ives' thinking to multiple directions and perspectives, setting new philosophical backgrounds on structuring a music work<sup>5</sup>. Thus, various elements of numerous non-western cultures, often become points of inspiration in terms of creating previously unheard sounds for, what is called, American "concert music".

From 1965 to the present, ethnic sources have been the spine of George Crumb's compositional language. Crumb's inspirations can initially be found in the languages of the first 'colourists' such as Gustav Mahler, Claude Debussy, Maurice Ravel and Béla Bartók<sup>6</sup>. Strongly referring to cultures such as Indian, Chinese, Native American and others, his writing often creates a historical and geographical sonic universe, occupied and governed by humans<sup>7</sup>. At this point, it should be underlined that Crumb's human-based artistic approach is not only alternative, but also diametrically opposed to the ones which formed the European (and later American) serialism, as mentioned above. Depending on the historical era and the geographical location, the restless human attempt to explain the universe, either by mythological or by scientific perspectives, is the core of Crumb's compositional concern and his music often appears to be an inextricable part of this mental process. Modality, extended instrumental techniques, use of traditional instruments and symbolism/mythologism can be considered as three keys, which form George Crumb's idiomorphic compositional style.

### Modality in melodic shaping

Modality has been used by contemporary composers in order to enrich their melodic and harmonic palette with exotic sounds and to personalise their compositional style<sup>8</sup>. As Crumb focuses through his works on various cultures from India and the Far East, modality has been one of the most significant characteristics of his melodic writing. According to the composer's own words, he believes in the power of the chromatic scale<sup>9</sup>, which includes a variety of musical idioms such as tonality, atonality and non-microtonal modality<sup>10</sup>. As long as the chromatic scale includes the whole tonal system (Circle of Fifths) and a significant part of the modal system (non-microtonal modes), it constitutes a flexible pitch reservoir which can be easily adjusted to every composer's aesthetic and stylistic needs. The "Black Angels" String Quartet (1970) and the "Vox Balaenae" Trio (1971) are two of the most remarkable examples from Crumb's middle period works to highlight how various non-European traditions and their philosophical ideas contributed to the composer's melodic writing.

As a quasi-programmatic work, the "Black Angels" quartet highlights many points of our "troubled contemporary world"<sup>11</sup>, including the recent to the work's year of composition, Vietnam war. The melodic material of

<sup>2</sup> Borroff, Edith. 1986. *Three American Composers*. Lanham, MD: University Press of America.

<sup>3</sup> As mentioned by Griffiths (1978).

<sup>4</sup> Froom, David. 1994. *American Composers: The Emerging Generation*. Switzerland: Harwood Academic Publishers.

<sup>5</sup> Robert S. Clark. 1978. "American Composition Now". *The Hudson Review* 31(1). The Hudson Review, Inc: 141–46. doi:10.2307/3850158.

<sup>6</sup> Steinitz, Richard. 1978. "George Crumb". *The Musical Times* 119 (1628). Musical Times Publications Ltd.: 844–47. doi:10.2307/957785.

<sup>7</sup> Petersen, Nils Holger. 2010. Quotation and Framing: Re-contextualization and Intertextuality as Newness in George Crumb's Black Angels. Routledge. [http://p1kitapp01cur.adm.ku.dk:8081/portal/da/publications/quotation-and-framing\(37f3e207-6ec3-48cf-b63f-0dd3b87a2b27\).html](http://p1kitapp01cur.adm.ku.dk:8081/portal/da/publications/quotation-and-framing(37f3e207-6ec3-48cf-b63f-0dd3b87a2b27).html).

<sup>8</sup> Stuckenschmidt, H. H. (1963). "Contemporary Techniques in Music." *The Musical Quarterly* 49(1): 1–16.

<sup>9</sup> Edward, P. (2004). "Symmetry and Goal-Directed Motion in Music by Béla Bartók and George Crumb." *Tempo* 58(228): 32–39.

<sup>10</sup> Stuckenschmidt, H. H. 1963. "Contemporary Techniques in Music". *The Musical Quarterly* 49(1). Oxford University Press: 1–16.

<sup>11</sup> Crumb, George. 1971. *Black angels: electric string quartet*. New York: C.F. Peters Corp.

the second part of the “Departure” movement (Sounds of Bones and Flutes) is based on a gradually unfolding, seven-note mode, which consists of the intervallic ratios illustrated by the figure below:

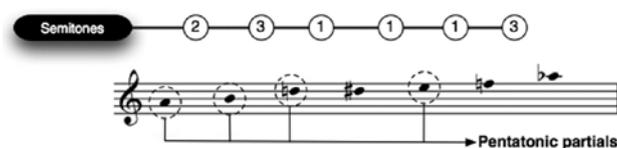


Figure 1. “Sounds of Bones and Flutes”

At this point, it should be highlighted that Crumb initially uses the pentatonic elements which the above mode consists of. Later on he lets the remaining pitches appear, extending the initial pentatonic atmosphere by alternating the tonal balance, which was generated at the very beginning.

The opening of the “Vox Balaenae” Trio (Voice of the Whale for amplified flute, Violoncello and Piano) brings the listener/researcher closer to Crumb’s modal melodic language and shows more clearly the links with Eastern and Oriental traditions which, as mentioned above, often characterise the composer’s aesthetic and philosophical approach. The melodic phrases of the first part of the trio (titled as “Vocalise”) are shaped according to an eight-note mode which follows the intervallic order illustrated at the figure below. At this point, one should notice that the mode consists of two parts, where the same intervallic ratios appear, first in consecutive pairs and then separately, in ascending order (2-1-2-1, 1-1-2-2):

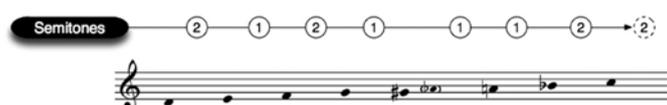


Figure 2. “Vox Balaenae”. Vocalise

Finally, it should be mentioned that this mode coincides with the minor-blues scale and at the same time, the melodic outcome is totally different from this musical idiom. Such a similarity can be found at the traditional polyphonic songs of Epirus (Northern Greece) which are based on the pentatonic scale, but aesthetically and functionally far away from the songs of Asian cultures. Here, one should underline the multi-cultural nature of a mode, which is able to frame diametrically different musical styles, depending on the time-period, location and the social group, to which they refer.

### Original non-western instruments and extended techniques

It is widely well-known that George Crumb appears to be one of the most sophisticated inventors of new timbres. His melodic writing is often enriched by either introducing original non-western musical instruments or by applying variable extended playing techniques to the western instruments. In any case, the instrumental writing can be characterised as imaginary and very sophisticated for both the western and the exotic musical instruments<sup>12</sup>. This specific way of timbral manipulation creates even stronger links to the Eastern traditional elements which are used by Crumb to base the main idea of his works on. The “Night of the Four Moons” quartet (1969) and the “Lux Aeterna” quintet (1971) are two remarkable examples of introducing original instruments from the specific cultures each of the above works refers to. In both works Crumb uses the traditional instruments (the banjo and the sitar respectively) in a sophisticated way, implying each work’s geographical and cultural inspiration point. At a first glance, however similar the compositional process of the two works looks like, there are fundamental differences in regard to the use of the Eastern and Western, mostly to the way they are combined together and interact to each other. At the “Night of the Four Moons” quartet, Crumb creates distant but audible timbral links between his personal melodic writing and the African-American culture. Sounds of Crumb’s home country have notably affected his music experiences and later inspirations<sup>13</sup>. Here, the banjo is used in a totally unconventional way, comparing with its original sounds and techniques from the African-American tradition. The performer is asked to play in an absolutely “western way”, just like a European orchestral plucked or pizzicato-played bowed instrument.

<sup>12</sup> As mentioned in Steintz (1978).

<sup>13</sup> Strickland, Edward. 1991. American composers: dialogues on contemporary music. Bloomington: Indiana University Press.

On the contrary, in the “Lux Aeterna” quintet, Crumb incorporates original Indian sonorities inside an absolutely secular western concept<sup>14</sup>. Hence, Crumb creates a clear intersection point between the Western Sacred and the Hindustani traditional music, setting up, as written on the score, a meditative atmosphere<sup>15</sup>.

Apart from the introduction of traditional instruments, most of George Crumb’s middle period works consist of melodic lines which are formed by the so-called, archegonal sonorities<sup>16</sup>, produced by applying a variety of extended techniques on the acoustic musical instruments<sup>17</sup>. Within Crumb’s middle period works, extended techniques are used to “orchestrate” a monophonic (melodic) line and play a substantial role for the texture development<sup>18</sup>. For the “Sounds of Bones and Flutes”, a movement of “Black Angels”, the four modal, as described above, melodic gestures are coloured by an archetype flute sound, which is created by applying the *Con Legno Tratto* technique. The harmonic background of this movement mostly consists of, as mentioned in the movement’s title, bone sounds, which are produced by a combination of different timbres: *Con Legno Battuto*, *Pizzicato*, *Glissando/Pizz.*, *Whisperings* and *Tongue-clicks*:

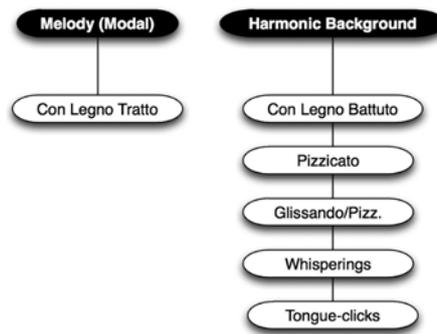


Figure 3. “Sounds of Bones and Flutes” timbres

In the opening of “Vox Balaenae”, Crumb illustrates the whale song by alternating the ordinary flute timbre with the human voice. More specifically, the techniques used in the “Vocalise” movement are:

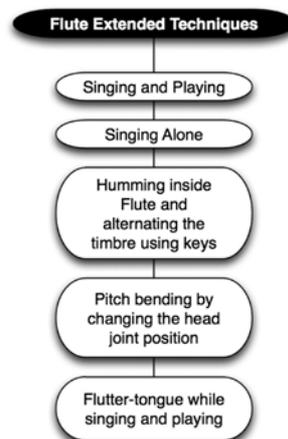


Figure 4. “Vox Balaenae”. Opening timbres

<sup>14</sup> Crumb, George. 1972. *Lux aeterna: for five masked musicians: soprano, bass flute (and soprano recorder), sitar, and percussion (two players)*. New York: C.F. Peters Corp.

<sup>15</sup> David Burge. 1980. Review of *Lux Aeterna*, for Five Masked Musicians, Soprano, Bass Flute (and Soprano Recorder), Sitar, and Percussion (2 Players). *Notes* 36(3). Music Library Association: 748–49.

<sup>16</sup> Adamenko, Victoria. 2007. *Neo-mythologism in music: from Scriabin and Schoenberg to Schnittke and Crumb*. Hillsdale, NY: Pendragon Press.

<sup>17</sup> As mentioned in Clark (1978).

<sup>18</sup> Fowler, Charles B. 1967. “American Composer Sketches: George Crumb”. *Music Educators Journal* 53(8). Sage Publications, Inc.: 61–63.

At this point, it should be noticed that the sound human voice is often a powerful tool for George Crumb to shape his symbolic, archetype melodic gestures. For example, in both the composer's masterpieces "Ancient Voices of Children", and the "Madrigals" (all books), a variety of "infant's sounds" (often mentioned as "bubbling"<sup>19</sup>) is used in order to stylise the melodic lines according to the general symbolic concept of each particular work.

During the second variation of "Vox Balaenae", titled "Proterozoic", sitar's melodic and harmonic sonorities are generated by unifying the timbres of the violoncello and the piano. In particular, George Crumb asks the Violoncello performer to perform the melodic phrases using the left-hand pizzicato technique while playing a tremolo-sustained pitch on the lowest string (B<sub>1</sub> by scordatura).

For the melodic shaping, an octatonic scale is used consisting of the intervallic ratios shown in the figure below:



Figure 5. "Proterozoic". Octatonic scale

In the background, the pianist performs a pizzicato of the same low B and after the sound appears, the piano string is buzzed by a metallic staple, generating a harmonic background similar to the characteristic drone, which is produced by the Sitar's sympathetic strings. At this point, it should be mentioned that many of Crumb's melodies are inspired by sounds which are described as "drones" (Songs, Drones and Refrains of Death). Here, Crumb introduces one of his most perceptive and sophisticated methods to approach an exotic sound. The figure below shows how the timbres are combined together to generate a sonic environment, which refers to the tradition of India:

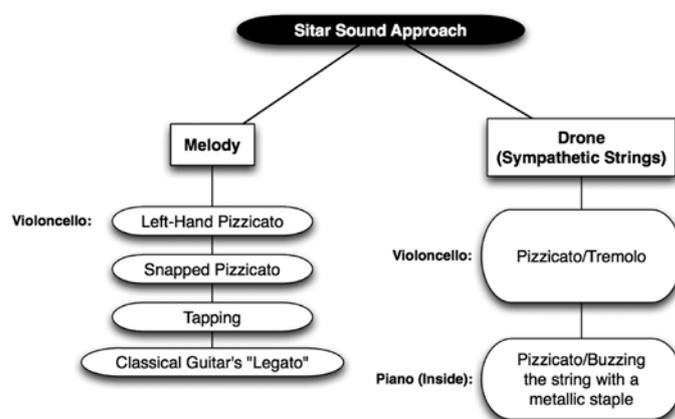


Figure 6. "Vox Balaenae". Sitar timbre

### Symbolism

George Crumb appears to be a composer absolutely familiar with the mythology of various cultures, such as Ancient Greek, the Norwegian, the Indian and others<sup>20</sup>. Myths are often points of departure to generate a symbolic musical framework. The textures often consist of melodic lines which interact with each other creating sort of meta-counterpoint<sup>21</sup> with variable cultural and philosophical extensions. Crumb's symbolism includes many references to masterpieces by previous composers. Consistently, there appears to be the com-

<sup>19</sup> As mentioned in Adamenko (2007).

<sup>20</sup> Victoria Adamenko. 2005. "George Crumb's Channels of Mythification". *American Music* 23(3). University of Illinois Press: 324–54.

<sup>21</sup> Adamenko, Victoria. 2007. Review of George Crumb and the Alchemy of Sound: Essays on His Music. *Notes* 64(1). Music Library Association: 72–73.

poser’s intuitive need to refer tyo the tonal past<sup>22</sup>. At the end of the “Vocalise”, the opening movement of the “Vox Balaenae” Trio, Crumb paraphrases the “Also Sprach by Zarathustra” (1896) characteristic opening phrase, using human voice (inside the flute) for the melody, ordinary piano sound for the chordal material and piano stopped-notes for the timpani rhythmical motive<sup>23</sup>. In “Black Angels”, there are clear references to Schubert [Death and the Maiden (1824)], Saint-Saëns [Dance Macabre (1874)] and John Dowland [Pavana Lacrimae (1604)]<sup>24</sup>. The incorporation of tonal elements, not only in Crumb’s music but in many other contemporary composers’ works, undoubtedly shows the insuperable artistic heritage of the Tonal era<sup>25</sup>.

Apart from the mythological elements and the references to the past, numerous sacred-music elements can very often be found in Crumb’s secondary titles. “God Music” (from “Black Angels”), Dance of the Sacred life-circle (from “Ancient Voices of Children”) and Musica Humana/Musica Mundana (from “Star-Child”) are three of the most representative examples, where the religious elements dominate the specific parts of each work, setting this “cultural rules” for the generation and the elaboration of the melodic, harmonic and timbral music material. In the “Black Angels” string quartet, the significant according to the Bible numbers seven and thirteen are used not only as religious symbols but also as numeric parameters for the structure of every work’s movement:

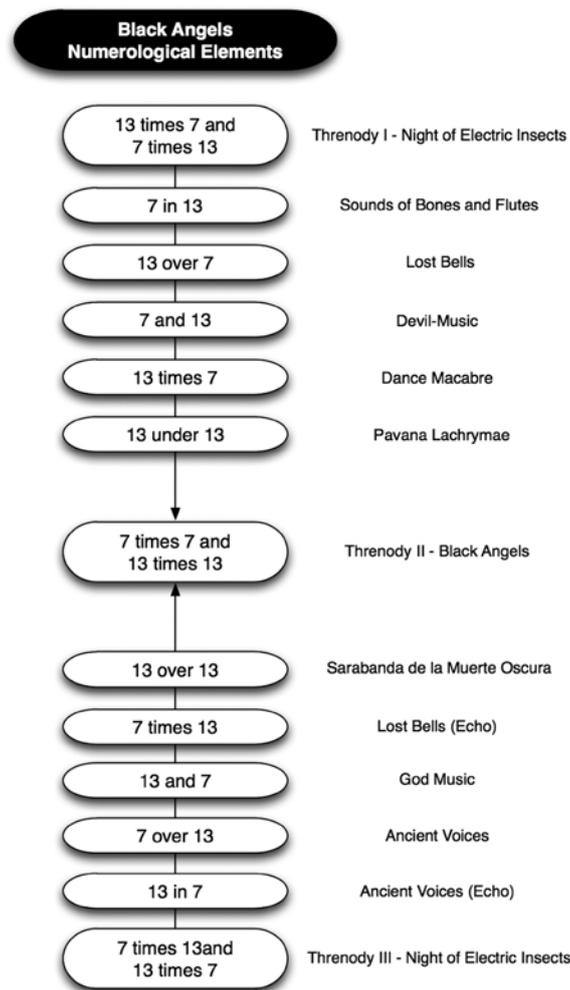


Figure 7. “Black Angels” numerology 7–13

<sup>22</sup> Edward Pearsall. 2004. “Symmetry and Goal-directed Motion in Music by Béla Bartók and George Crumb”. *Tempo* 58(228). Cambridge University Press: 32–39.

<sup>23</sup> As shown in *Vox Balaenae* (1973).

<sup>24</sup> As shown in *Black Angels* (1971).

<sup>25</sup> As mentioned in Froom (1994).

Symbolism reaches its peak by Crumb's optical scores which are mostly used in his "Makrokosmos I & II" cycles of piano pieces. Figure 8 shows a list of titles and symbols in the two volumes:

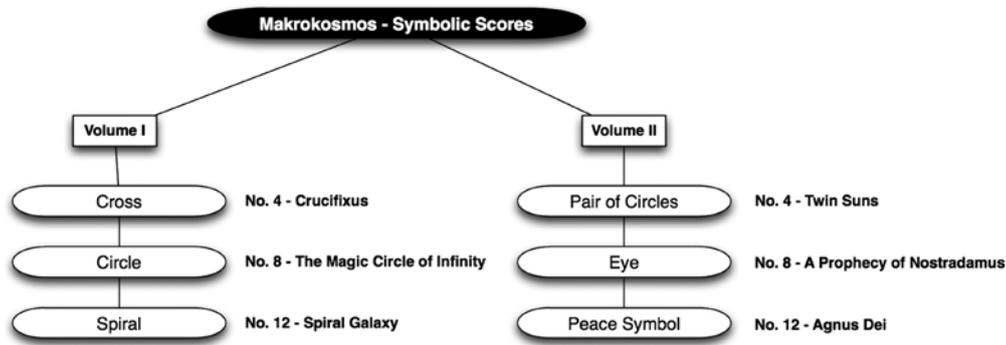


Figure 8. "Makrokosmos" symbols

Optical scores are used not to cause further (and probably meaningless) difficulties to the performer, but they illustrate both the structure and the expressive mood of each part, aiming to help the performer determine the fundamental principles of Crumb's symbolic language. Musicologist Edward Strickland mentions that "Schematic notation supports the composition. A cyclic score must sound cyclically, like a spinning wheel."<sup>26</sup> Symbolic notation aims to a perfect balance between the ear and the eye<sup>27</sup> and compiles the composer's multidimensional approach regarding the aesthetic, the philosophy, the selection of text, the compositional language and the form<sup>28</sup>.

Finally, occasional theatrical elements are used to support the main ideas of specific works or sections. Both in "Vox Balaenae" and the "Lux Aeterna", the performers are masked in order to represent the powers of nature. Furthermore, in "Crucifixus" piece of "Makrokosmos I", the pianist shouts out the word "Christe!" while playing on the two extreme ends of the piano in order to create an image of Crucified Christ; in the final bar of "Vox Balaenae", the pianist has to perform the last gesture without producing any sound on the piano, letting the audience have the impression that an echo of that specific melodic gesture is still fading out.

In conclusion, melody for George Crumb is not a simple succession of tonal pitches, arranged on a specific timeline, but a set of sound events which are put in front of a strong geographical, cultural and philosophic background. Melodic shaping, which follows all the principles presented and analysed in this paper, is mainly a multi-cultural tool of expression with many symbolic extensions which very often turn the performance into a ritual. Crumb's audience is almost never restricted inside "academic" compositional limits<sup>29</sup> but usually experiences the local music tradition of various cultures, through the aesthetic directions the composer each time chooses to follow.

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<sup>26</sup> As shown in Strickland (1991).

<sup>27</sup> As shown in Steinitz (1978).

<sup>28</sup> As shown in Adamenko (1993).

<sup>29</sup> As shown in Adamenko (2007).

- Fowler, C. B. (1967). "American Composer Sketches: George Crumb." *Music Educators Journal* 53(8): 61–63.
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## Egzotiniai skambesiai George'o Crumbo vidurinio laikotarpio kūrinių melodikoje

### Santrauka

Totalinio serializmo įsigalėjimas Europoje (ir iš dalies Amerikoje) XX amžiaus 6-ajame dešimtmetyje atvėrė kelius ne tik naujam mąstymo būdai, bet ir daugeliui alternatyvių komponavimo metodų – ypač tiems, kurių nesaisto serijinis muzikos parametru organizavimo principas. Daugeliu atvejų kompozitoriai, siekdami atriboti savo muzikos kalbą nuo europietiško ir amerikietiško serializmo įtakų, sėmėsi įkvėpimo iš įvairių rytiškos tradicijų. Egzotinių elementų įtraukimas į kompozitorių „gimtąją“ muzikinę kalbą XX a. 6-ojo dešimtmecio Europoje ar Amerikoje nebuvo visiškai naujas dalykas. Rytiškos skambesį savo kūriniuose pasitelkdavo ir daugelis žymių praeities kompozitorių, tokių kaip Debussy, Mahleris ar Verdi (XIX a. pabaigoje–XX a. pradžioje), o dar anksčiau – Mozartas (klasicizmo epochoje). Nuo XX a. 3-iojo dešimtmecio Henry Cowellas ir jo amžininkai, į savo priemonių arsenalą įtraukę daugybę nevakarietiškos kultūros elementų, paruošė dirvą tolesnėms instrumentų tembrinių galimybių paieškoms. Šiek tiek vėliau dauguma kompozitorių ėmė formuoti savo stilių pasitelkdami egzotinių kraštų liaudies dermes, plėsdami muzikos instrumentų tembrines galimybes, o kartais ir naudodami nevakarietiškos kilmės instrumentus.

Pavyzdžiui, daugumoje George'o Crumbo kūrinių iš nevakarietiškos elementų buvo sudaroma visa muzikinė medžiaga, o melodinės linijos formuojamos laikantis tos kultūros, iš kurios kilę tie elementai, filosofinių nuostatų. Trio elektrinei fleitai, violončelei ir įgarsintam fortepijonui „Banginio balsas“ („Vox Balaenae“) pradžia ir styginių kvarteto „Juodieji angelai“ („Black Angels“) antra dalis (dalių pavadinimai – „Vokalizė“ bei „Kaulų ir fleitų garsai“) bene ryškiausiai iliustruoja, kaip kompozitorius kūrė savo melodiką nevakarietiškos dermių pagrindu. Išplėstinės instrumentinės technikos čia dažnai pasitelkiamos norint „instrumentuoti“ vienbalses modalines linijas. Negana to, dviejuose „Makrokosmų“ cikluose fortepijonui, „Senoviniuose vaikų balsuose“ („Ancient Voices of Children“) balsams ir ansambliui bei kompozicijoje „Žvaigždžių vaikas“ („Star-Child“) balsams, mušamiesiems ir dideliame orkestrui galime aptikti identišką melodikos formavimo būdą, grindžiamą ne vien egzotine medžiaga, bet ir įvairiomis Rytų filosofijos teorijomis, kaip antai archetipinis Visatos vaizdavimas rato pavidalu (mandala) kultūrose, kuriose išpažįstamas induizmas ir budizmas.

Straipsnyje nagrinėjama George'o Crumbo vidurinio laikotarpio kūrinių melodika ir muzikinės medžiagos sudarymo būdai akcentuojant garsų aukštį bei tembrą. Taip pat aptariami šie fundamentalūs komponavimo klausimai:

- išplėstinių instrumentinių technikų funkcija ir vaidmuo George'o Crumbo melodikoje;
- egzotinių dermių ir filosofinių teorijų įtraukimas į vakarietišką komponavimo sistemą.

**Manifestations of a Diagonal Dimension  
in Quasi-Melodic Elements of Sonoristic Music:  
*Incantation of the Freezing Haze* for flute solo by Andrius Maslekovas**

**Annotation**

This article addresses the issue of the application of the elements of melodic nature in music that is centered on the development of sound quality. It focuses on a particular use case scenario, when these *quasi-melodic* elements are not treated as contradictory to attributes of sound quality. This use case scenario is rather common in solo compositions for melodic instruments by composers who are known for their interest in timbre and other attributes of sound quality. This article analyzes the phenomenon of a diagonal musical dimension – an interstitial auditory state between horizontal and vertical dimensions that cannot be separated into horizontal and vertical components. This unique state creates a favorable environment for unfolding the potential of sound quality within the elements of melodic nature. One of the key notions discussed in this article is the one of sonoric intensity, which is a measure of sound quality that consists of a variation between timbral dimensions (attack quality, harmonicity, brightness), loudness and temporal dissonance (see Stockhausen 1959). Lastly, the composition for flute solo *Incantation of the Freezing Haze* (2013) by Andrius Maslekovas is being analyzed in order to illustrate the alternatives of constructing diagonal sonoric structures and employing them in the structure of the piece.

**Keywords:** attack quality, brightness, diagonal, flute, harmonicity, horizontal, intensity, loudness, *quasi-melodic*, solo, sonoristic, sound quality, structure, temporal dissonance, timbre, vertical.

Melody and sonoristic music are two notions that rarely come together. In fact, melody, which essentially is based on the sequences of pitches, might be considered as an antipode to timbral development that is present in most cases of sonoristic music. However, melody is not a simple mechanical process, or aesthetic attribute, but rather an archetype that tends to manifest itself even in very hostile environments. In case of sonoristic music, its dehiscence is very well observed in solo compositions for melodic instruments.

In music theory melody is usually attributable to a horizontal musical dimension and vice-versa. However, compositional practice suggests that in sonoristic music melody (as an archetype) is not bound to a single horizontal dimension, but can easily gain certain qualities that alters its perception to be interpreted as vertical or even diagonal. This paper aims to discuss the phenomena of the diagonal musical dimension and observe its manifestations in elements of sonoristic music that are stimulated by the melodic archetype.

This paper presents a more detailed view on the diagonal dimension that was only briefly addressed in my publication *Vertical and Horizontal Sonoric Structures as Constructional Elements of Sonoristic Music* (Maslekovas 2014) and may be considered as an addition to the aforementioned article.

**1. Vertical and horizontal dimensions**

In order to understand the concept of diagonality and a diagonal musical dimension it is necessary to briefly discuss another two musical dimensions that are present in this theory – horizontal and vertical musical dimensions. In the most common sense we tend to interpret the horizontal dimension as melody and the vertical dimension as harmony. However, musical dimensions are more cognitive rather than structural notions, thus they are notions of a significantly broader sense than just harmony and melody. Verticality and horizontality are two fundamental categories, as described by Rosch (1975, 1978). **Horizontality** is to be understood as the spreading out of different exemplars within the same unit in which the category is still identifiable no matter how big of a deviation from the original model occurs. **Verticality**, on the other hand, specifies relationships between categories, which leads to the idea of the hierarchy of subordinate levels.

It becomes evident that harmony and melody are just one of a few possible manifestations of verticality and horizontality respectively. The definition of horizontality made by Roch is so accurate and general that it perfectly fits the manifestations of this dimension in sonoristic music, however verticality is not nearly so obvious. Rosch defined three hierarchical levels of verticality: the **superordinate**, the **basic**, and the **subordinate** levels. At the highest or **superordinate** level, the category is defined by its function. The intermediate or **basic** level contains the greatest number of specimens having common attributes. They belong to the functional category but remain independent of one another. The lowest level, the **subordinate** is made up of all imaginable variations of the specimens from the basic level.

Manifestations of verticality in sonoristic music are very close to what is described as a **basic** level of categorization. The idea of the **basic** level of categorization in listening to music may be conceived of in terms

of different cues<sup>1</sup> being abstracted within the same work. Each of these cues will engender its own relationships of horizontality. They will each have their own function and create their own particular auditory image yet share a common reference: the style of the work. However, the relationship with horizontality might be weakened in purely vertical sonoristic music, meanwhile in cases where the horizontal dimension is a clear priority, while the vertical dimension can manifest itself on a subordinate level<sup>2</sup>.

In sonoristic music horizontal and vertical dimensions manifest themselves via horizontal and vertical sonoric structures respectively. As it was discussed in my previous paper (Maslekovas 2014), there are three main criteria for both of these dimensions to be linked to any textural structure in sonoristic music.

- A textural structure produces/possesses horizontal sonoric values in a given period of time if its cues are being abstracted from the shift in its **integrity**<sup>3</sup>, **duration** and/or the frequency of a tone or cluster, to which we will refer in a simplified manner and label it as **pitch**. These three criteria indicate **changes in continuity**. This is the main criteria of horizontal sonoric structures.
- A textural structure produces/possesses vertical sonoric values in a given period of time if its cues are being abstracted from the shift in its **range**<sup>4</sup>, **width**<sup>5</sup> and/or **density**<sup>6</sup>. These three criteria indicate **changes in sound quality**. This is the main criteria of vertical sonoric structures.

## 2. Sonoric intensity

In sonoristic music the array of vertical auditory values is significantly expanded in comparison with its tonal counterpart. Changes in sound quality are no longer achieved solely by harmony or intervallic density, but also due to changes in loudness and timbral attributes of the sound.

Timbral attributes can play a crucial role in changes in sound quality of sonoristic music. However, timbre itself is a multidimensional category. It cannot be described by a single criteria and there are countless subjective characterizations that are aiming to describe timbre, such as *bright, dark, rich, harsh, soft* etc. Shlomo Dubnov marks out four most relevant criteria for describing timbre:

- **Brightness**. Brightness is one of the main dimensions in the description of timbre, and is important for judgments of similarity. It represents the *centroid* of the distribution of spectral energy.
- **Spectral flux**. This is another dimension in the description of timbre but it is not well defined. Spectral flux stands for the synchrony of onset and fluctuations in time of the harmonics. There is however no commonly accepted method for calculating this property.
- **Harmonicity**. This parameter distinguishes between “harmonic spectra” (eg. vowels and most musical sounds), inharmonic<sup>7</sup> spectra (eg. metallic sounds) and noise (spectra that vary randomly in frequency and time). In other words this feature represents the degree of the definability of pitch due to sound partials being integer multiples of the fundamental frequency.
- **Attack quality**. Attack quality relates to the initial stage in sounds envelope when the pitch is not well defined and it represents the degree of noise present at this stage (Dubnov 1996: 8).

We believe that the variations of values within inner dimensions of timbre determine the most significant variable for distinguishing vertical sonoric values; we will refer to it as the **sonoric intensity** of the

<sup>1</sup> “A cue is a kind of conspicuous point that becomes fixed in memory by virtue of its relevance and by repetition. What might constitute a cue depends on the cultural and historical provenance of a given piece” (Deliège and Mélen 1997: 390). In Western music, since the 15th century until the end of common tonal practice cues are being abstracted primarily from motivic elements. However, in later periods these are more and more frequently substituted by other musical elements. In case of sonoristic music that would be characteristic timbre, orchestration, specific tessitura, a certain cluster range or anything else that defines a specific sound quality of a certain sounding object.

<sup>2</sup> It is common for composers to have no intentions to exploit one of the discussed dimensions and focus exclusively either on the vertical or horizontal dimension. In the first case scenario most of the cues are being abstracted from the changes in the vertical dimension, therefore the horizontal musical dimension is being cognitively pushed to a background. In the second case, the majority of cues are being abstracted from the changes in the horizontal dimension, therefore the vertical dimension is being cognitively pushed to a background and becomes totally subordinate to the horizontal dimension. In any of these cases the dimension that is being cognitively pushed to a background despite being the permanent part of the auditory field might not be a significant part of a compositional idea and/or structure.

<sup>3</sup> A number of formations can fall into the concept of integrity. It could be such playing techniques as *vibrato, tremolo, frullato, bisbigliando*, trills of two independent pitches, rhythmical variations of a continuous sound, etc.

<sup>4</sup> **Range** being determined by relative pitch and/or time-span.

<sup>5</sup> **Width** being determined by the interval between the highest and the lowest pitches.

<sup>6</sup> **Density** being determined by intervallic consistency and timbral characteristics.

<sup>7</sup> Sounds that have overtones which are not harmonics of the fundamental.

sound<sup>8</sup>. Sonoric intensity is to be considered similar to any secondary musical parameter<sup>9</sup> of sound quality that cannot be expressed in a scalar manner, i.e. two different sonoric intensities can only be compared to each other using relative amounts such as “much of” or “not much of”, and “more of” or “less of” (see Snyder 2000: 195–196).

**Attack quality** is the most obvious value in determination of sonoric intensity. The more noise the attack possesses, the longer its decay – the more noticeable the parameter of timbre becomes in the auditory field. As a result, the more noticeable the timbre is, the more intense is the perception of it. It is fairly similar when it comes to **harmonicity**. The less definable the pitch is the more “colliding”/dissonant overtones there are in the spectrum of the sound, which are perceived as noise. Therefore, sonoric intensity is reversely proportional to the definability of pitch. However, the impact of harmonicity is more evident in adjacent sonoric structures, rather than in a continuous timbral shift. This happens because of the specific nuances of playing techniques that are usually employed in the process of emphasizing harmonicity (such as *sul ponticello*, for string instruments, *airy* sounds for wind instruments, harmonics, etc.). These techniques, used for altering the harmonicity of a continuous sound or a passage results in a considerable loss in loudness compared with notes that are being played in a regular way.

**Loudness** is one of the most important parameters in describing the quality of the sound. According to Mārtiņš Viļums, the cognition of vividness of the sound source and qualitative value also depends on the level of the loudness and inner dynamics of the sound (articulation of loudness). Deviations in loudness can emphasize or suppress the information that is spread by sound source (Viļums 2011: 65). It is a key element in the perception of overall acoustic intensity (as in physics) and is equally important in the perception of sonoric intensity as is timbre itself. Loudness can affect the perception of timbre intensity in two ways:

- as the overall vividness of the sound,
- as articulation.

As the overall vividness of the sound it affects the perception of a single element and can codetermine the sonoric intensity of it in a context of adjacent elements. As articulation (eg. *crescendo*) it can affect the shift of sonoric intensity either within a single element, or within a set of elements (eg. gesture).

A very important attribute of loudness is that it can increase or suppress the information that is spread by a sound source. In this case it can enhance or diminish the effects of any dimension of timbre and consequently alter the overall sonoric intensity. A good example would be harmonics of strings and woodwinds. Despite their harmonicity and brightness being higher compared with notes played in a regular manner, the amount of noise in their attack is significantly lower, as well as their overall vividness. That makes harmonics to be perceived as of a lower sonoric intensity than a note of the same pitch played in a regular way.

**Brightness** represents how high is the spectral centroid of the sound. The higher is the centroid the brighter and more distinct is the timbre. Its influence is heavily dependent on loudness as well as a relative **height** of pitch. According to Roger E. Bissel, higher pitches are perceived as more vivid and consequently are perceived as more intense. Lower pitches are to the contrary, perceived as less intensive, but “heavier”, as they gain allusion to physical weight (Bissel 1999: 74–75). This unique attribute in certain cases can alter the perception of sonoric intensity, as “heavier” lower pitches can be interpreted as more intense than “lighter” higher ones. This is true in certain circumstances, when other criteria of sonoric intensity tend to suppress the vividness of pitch height, for instance, higher pitch is significantly more quiet (**loudness**), or has significantly less noise in its **attack** phase, or has significantly lesser **harmonicity**. That makes the relative pitch height the weakest criteria of sonoric intensity, as it can be suppressed by the rest.

However all the aforementioned criteria often affect the perception of sound quality simultaneously. Therefore different levels of each criteria may cause different levels of sonoric intensity.

The last criteria that can significantly alter sonoric intensity is **temporal dissonance**, which defines the level of complexity in the metro-rhythmic organization that, according to Stockhausen (1959), is one of the key elements in depicting tone colour. For the sake of simplicity and feasible extent of this article we can make a bold statement, based on Stockhausen’s *harmonic phase-spectrum* theory, that the more complex the metro-rhythmic organization the bigger sonoric intensity is created.

<sup>8</sup> Sonoric intensity of the sound in this paper should not be confused with acoustic intensity, which is an SI unit being measured in the watt per square meter (W/m<sup>2</sup>). Acoustic intensity, as the sound power per unit area, is an effective tool for measuring sound quality in laboratory conditions; however, it is extremely rarely used in compositional practice of acoustic music. Thus, we tend to establish the term of sonoric intensity to serve as a similar notion, which would reflect the compositional idea rather than a precise value, which might not necessarily be an exact result of composers’ intentions.

<sup>9</sup> As described by Snyder (2000).

### 3. Diagonal dimension and diagonal sonic structures

**Diagonal dimension** in music is a rather philosophical phenomenon. It is best described by Deleuze when he makes parallels between music by Boulez and the manner of works by Proust. It is described as a “manner in which noises and sounds detach themselves from the characters, places and names to which they are first attached in order to form autonomous “motives” that ceaselessly transform themselves in time, diminishing or augmenting, adding or subtracting, varying their speed and their slowness” (Deleuze 1986. In: Murphy 1998: 70).

Deleuze presents the idea that such a variety is developed in the autonomous dimension of time. He calls it a “block of duration”, a “ceaselessly varying sonorous block”. “And the autonomous dimension, which is not pre-existent and is drawn at the same time as the block varies, is called a diagonal in order to better mark the fact that it is reducible neither to the harmonic vertical nor to the melodic horizontal as pre-existent coordinates” (ibid.).

The **diagonal musical dimension** is an interstitial auditory state between horizontal and vertical dimensions that sometimes manifests itself as an independent textural element and herewith sonic structure. We will refer to these as diagonal sonic structures. However, diagonal sonic structures are not a mere mechanical combination of simultaneously sounding vertical and horizontal structures, they cannot be separated into horizontal and vertical components, i.e. it acquires its vertical and horizontal values not in a mechanical, but in a conceptual process. The best illustration of diagonal structures in western classical music (as proposed by Deleuze) is a cadenza. It is a short episode that simultaneously carries vertical and horizontal auditory values.

In sonoristic music the diagonal dimension gains a more significant role in the act of musical composition than it had in tonal music. It can appear in any texture of the composition and serve either as a conceptually independent dimension, or as a conceptual medium between horizontal and vertical dimensions that encompasses all of their attributes.

We can distinguish four main meta-models of the diagonal musical dimension that carries the formation and development of diagonal sonic structures:

- Descending and decreasing,
- Ascending and decreasing,
- Ascending and increasing,
- Descending and increasing (Fig. 1).

These meta-models can form diagonal sonic structures by themselves, or in combination with each other. We will call them **diagonal structures of discreet and composite formation**, respectively. Diagonal sonic structures of **discreet** formation are very insular and integral and often manifest themselves as short episodes. As they are linear structures, as well as structures of ascending or descending intensity, they reach their peak or bottom in a rather short period of time. That causes certain limitations in terms of their duration. The **composite** formation of diagonal structures can form highly complex structures that feature both – horizontal (linear) and vertical (qualitative) development (Fig. 2). Thus they have the potential to extend in a longer period of time, or even shape a continuous fluctuating texture.

Now we will try to look into some of the diagonal structures in “Incantation of the Freezing Haze” for flute solo by Andrius Maslekovas and analyze the formation of their sonic intensity. We would like to stress here that changes in timbral attributes displayed in the following schemes are not

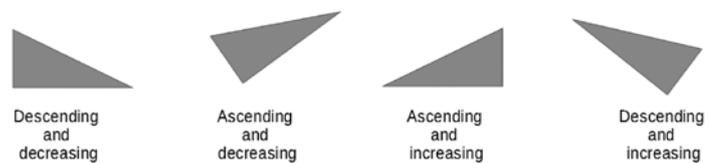


Figure 1

based on acoustic spectrograms of an actual recording of the piece, but rather on generic attributes of each of the employed playing techniques. The reason behind this choice is that the performance of such techniques requires an extreme precision which is almost impossible to achieve and any misinterpretation by a performer can significantly alter the data, for instance a single misuse of a tongue could result in a much harsher attack quality than intended by the composer and can potentially distort the view of the schema behind the segment. Thus, we believe that determining sonic intensity by generic attributes of playing techniques is more reliable as far as the composer’s original intentions are concerned.

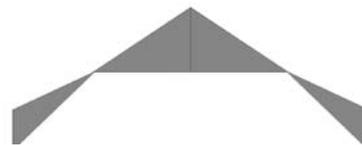


Figure 2

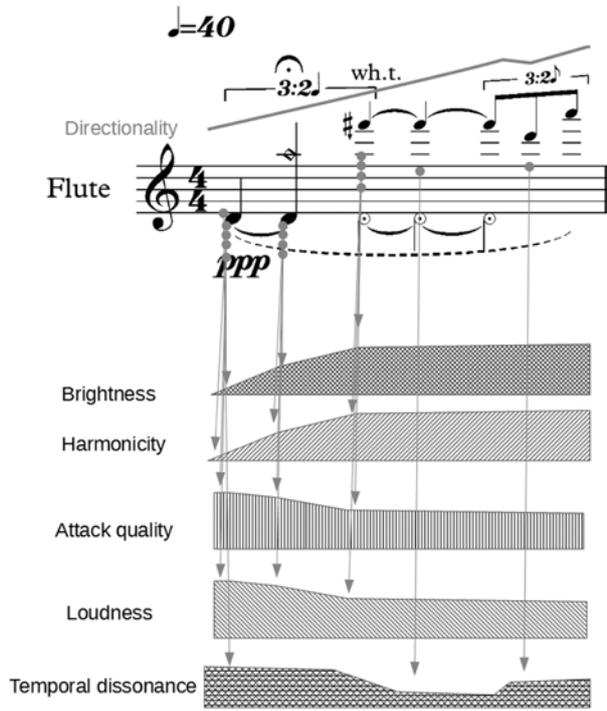


Figure 3

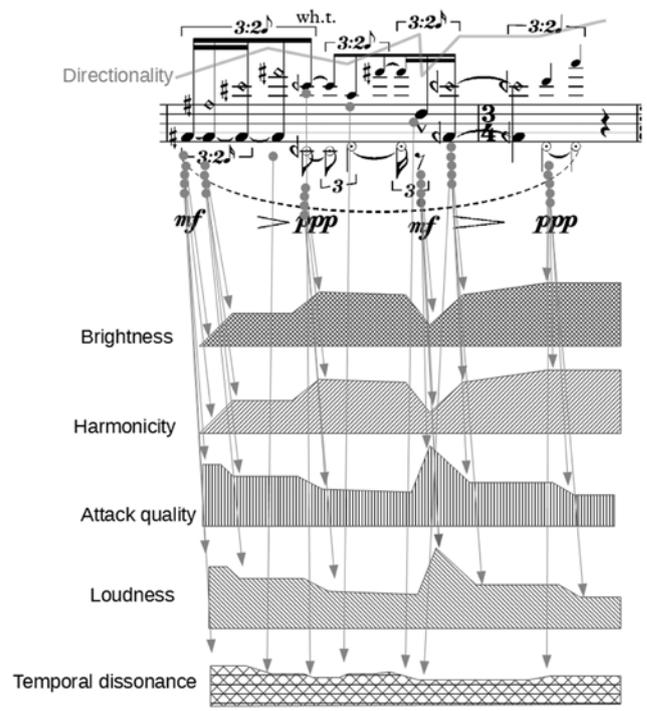


Figure 4

If we look at the first bar of the piece (Fig. 3) we can see a melodic ascendance shown as *directionality*. Below the core we can see a gradual increase in brightness and harmonicity, but also a gradual decrease in the amount of noise in attacks and overall loudness of the sounds. In this case loudness and shift in attack qualities overshadow harmonicity and brightness. Meanwhile the melodic ascendance, which is very much dependent on brightness does not produce a significant increase of intensity, as brightness is being suppressed by other parameters. Thus, the allusion to physical weight comes into action and higher notes are being perceived as *lighter* and, as a result, less intensive. The whole structure is being perceived as a **discreet diagonal ascending and decreasing** sonic structure.

The **diagonal structure of composite** formation manifests itself beautifully in bars 23–24 (Fig. 4). We can see a quasi-melodic line that constantly changes its direction, its sound quality is also constantly changing: the first note is being played in the usual manner, next three notes as harmonics and the following three as whistle tones. Then the process is repeated while altering the durations. We can see fluctuations in all the parameters of sonic intensity within the segment.

We can notice that in both of the examples the changes in all the dimensions of sonic intensity occur at the same moment (with some exceptions in temporal dissonance). This is a common but not an obligatory case. If we look at the next example (Fig. 5) we can see that changes in different dimensions of sonic intensity occur at different points. A very important moment of this example is how the *diminuendo* affects different dimensions of sonic intensity. It decreases the loudness, and consequently helps harmonicity and attack quality to gain significance in the auditory field.

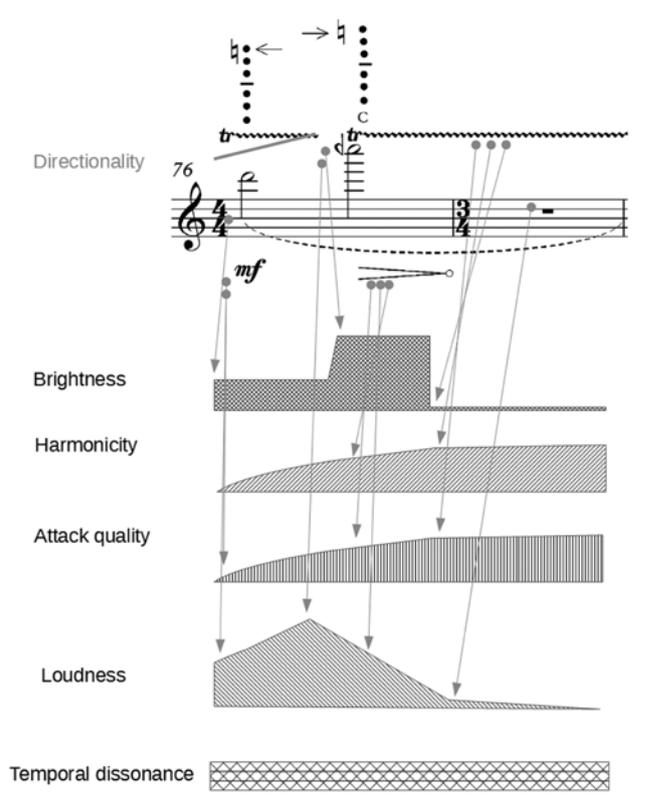


Figure 5

#### 4. Diagonal structures within in a composition

In this section we will briefly discuss how the diagonal dimension manifests itself in the realms of an actual musical composition. “Incantation of the Freezing Haze” was composed addressing the issue of the application of vertical and horizontal dimensions in compositions for melodic instruments. It aims to explore the depth of sound qualities and expose vertical attributes of the sound while keeping close to horizontal/melodic nature of the instrument. The diagonal dimension and diagonal sonoristic structures are employed here as a primary material, that ensures a degree of fusion between horizontal and vertical qualities. However, the level of fusion tends to vary, as some sonoristic structures tend to be perceived as “possessing more vertical qualities than others” and vice versa, i.e. each diagonal sonoristic structure has an individual balance of vertical and horizontal values due to various combinations of *Gestalt* principles and other cognitive aspects of music. Differently balanced diagonal sonoristic structures become a significant part in the construction of the form of this particular piece.

The pitch organization of the piece is based on the harmonic spectrum of D3. At the beginning of the piece the depth of sound qualities are explored via quasi-melodic passages that consists only from the first seven harmonics from the spectrum. That results in a perception of verticality that is scattered over certain time-spans. During the first segment of the piece (bars 1–24) a diagonal dimension is employed as a tool of cognitive indetermina- tion between horizontal and vertical dimensions, as all musical material is in a constant balancing between these two realms (Fig. 6).

As more harmonics from the given spectrum are gradu- ally introduced, the intervals between pitches become narrower and linear continuation highlights itself more evidently since Bar 25. Manifestations of a diagonal dimension here are primarily employed as microsonoristic<sup>10</sup> articulations that help quasi-melodic elements to expatiate over a mere horizontal linear direction. The diagonal dimension adds constant fluctuations of sonoristic intensity in each quasi-melodic element, however it does not suppress their linear continuation and the melodic origin of the musical material remains more evident than in the first segment. An impor- tant moment of this segment occurs in Bar 32, as the balance between the vertical and hori- zontal dimensions within the structures changes from the dominance of the horizontal dimension, to the dominance of the vertical dimension via a sudden expansion of vertical attributes of the sound and an alteration of a linear direc- tion in a way that contradicts the *Gestalt* principle of Good Continuation. We tend to call this transition a **diagonal shift** (Fig. 7).

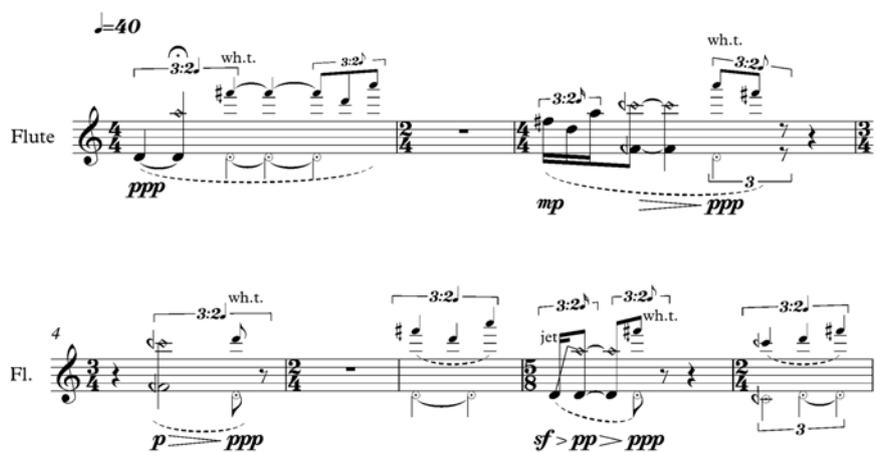


Figure 6

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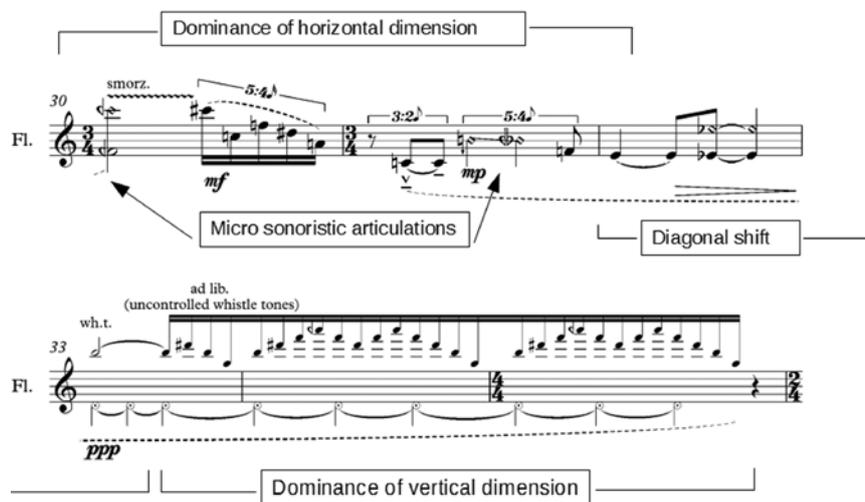


Figure 7

<sup>10</sup> Term established by M. Viļums (see Viļums 2011: 168–170).



In the fifth section (bars 91–124) a constant and rapid diagonal shift is exploited by combining rapid changes in sonic intensity and wide intervals between pitches with a fast linear motion and narrow quasi-melodic intervals (Fig. 9).

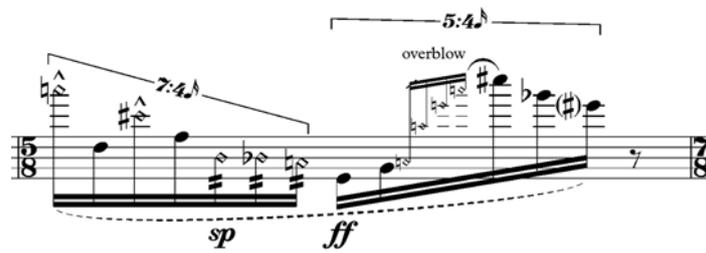


Figure 9

The last section (bars 124–145) displays sonic structures that are no longer diagonal, but purely vertical and purely horizontal. This is achieved via quasi-melodic intonations and rapid passages for the horizontal dimension, and long notes, multiphonics and fields of uncontrolled whistle tones for the vertical dimension. While a diagonal structure appears only in the last bar of the piece (Fig. 10).

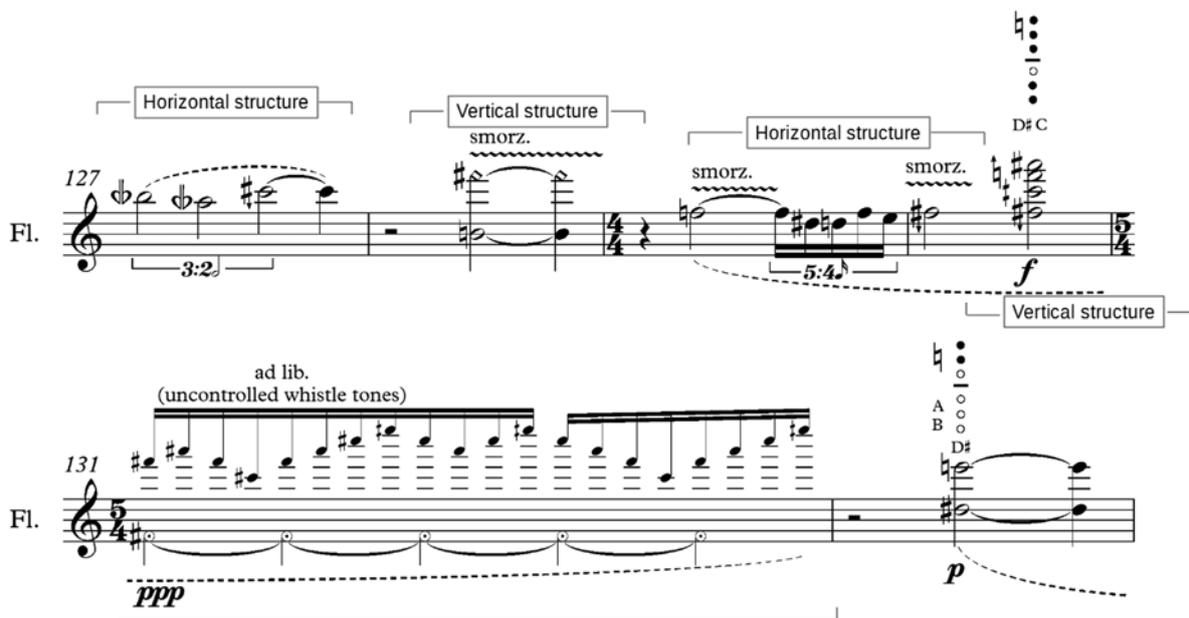


Figure 10

The texture of the piece consists of two base models of diagonal structures. The first one consists of slightly larger intervals (lower harmonics of the series), and is attributed to softer timbre (harmonics, whistle tones, air sounds etc.). It produces slightly more vertical values than the second one. The second one consists of narrower intervals (higher overtones of the series) and is attributed to sharper timbre with more noise in the attack envelope (key clicks, *quasi-pizzicato*, tongue ram etc.). Each of the base models has its own line of structural transformations that are represented in a scheme (Fig. 11).

There are two kind of confluences of these base models throughout the piece. They both encompass different elements form different iterations of Base model 1 and Base model 2. The key difference in is in their formation. The first confluence is developed by combining the elements of different base models in a horizontal way, i.e. their attributes are perceived in a linear way. In this particular case this effect is achieved by combining

Textural base model 1

Horizontal confluence

Vertical confluence

Textural base model 2

Figure 11

long notes with timbral trills (*bisbigliando*), that carries material from the first base model, and transforming the trill into a percussive key noise during the rests that carries cognitive ties with the second base model. The second confluence is constructed by combining the elements from the base models in a vertical way. It is achieved by exploiting larger intervals that are associated with Base model 1 during a rapid linear movement that is associated with Base model 2, as well as adding other attributes that produce cognitive links to Base model 1, such like air sounds, overblow, etc.

These textural base models have their unique roles in each of the previously discussed sections of the piece and consequently in the realms of musical form (Fig. 12).

Segment	I	II	III	IV	V	VI
Dominant textural base model	Base model 1	Base model 2	Base model 2	Horizontal confluence	Vertical confluence	Base model 1 Base model 2
Dominant perceptual balance of vertical and horizontal values in diagonal structures	V	H → V	H	V → H → V	H V	V H

Figure 12

### Conclusion

This paper is centered around one particular piece, which demonstrates a sophisticated alternative in dealing with quasi-melodic material and focusing on sound quality at the same time. Its two main notions of sonic intensity and the diagonal dimension help us understand how these two contradictory poles can be merged into one entity, which can be used as primary compositional material. The melodic nature of musical material (which in this particular case comes from the nature of the instrument itself) is inseparably merged with changes of timbral attributes (brightness, harmonic, attack quality), loudness and temporal dissonance. Combination of changes within these parameters, which we refer to as a sonic intensity, in combination with the material of melodic nature, creates a unique musical dimension which is neither horizontal nor vertical but rather diagonal.

Constructional patterns which arise in this diagonal musical dimension are formed on the impact of the melodic realm and are manifestations of certain constructional archetypes. The amount of variables that may influence the formation of diagonal sonic structures is very rich and carries a lot of potential in their development and structural organization. Therefore the use of a diagonal musical dimension and diagonal sonic structures is fairly widespread as compositional principles among contemporary composers, who are interested in operating the sound quality. Thus, in our belief, these aforementioned notions could be used for compositional, or even deconstructional purposes, as they are meant to represent composer's intentions and give a perspective of certain alternatives when it comes to compositional strategy. However, due to a plethora of possibilities in construction of diagonal sonic structures and especially their structural organization, it is hardly adaptable as a universal deconstruction tool. Hence we would like to think of this theory as a revelation of certain compositional perspective that could provide useful research or inspirational material.

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**Diagonaliosios dimensijos apraiškos kvazimelodiniuose sonorinės muzikos elementuose:  
Andriaus Maslekovo *Incantation of the Freezing Haze* fleitai solo**

**Santrauka**

Straipsnyje gvildinama melodinės prigimties elementų panaudojimo skambesio kokybe operuojančioje muzikoje problema, kai melodinės prigimties elementai nėra traktuojami kaip sonoriškumo priešprieša. Tokie kompoziciniai sprendimai itin dažni kompozitorių, kurių kūryboje yra aiškiai išreikštas dėmesys skambesio kokybei, kūriniuose melodiniam instrumentams solo. Straipsnyje nagrinėjama diagonalioji muzikos dimensija – nedalomas vertikalių ir horizontalių muzikinės medžiagos savybių lydinys, dėl kurio melodinės prigimties dariniuose susidaro palankios galimybės skleistis skambesio kokybės potencialui. Itin svarbi yra šiame straipsnyje vartojama sonorinio intensyvumo sąvoka. Sonorinis intensyvumas – tai skambesio kokybės matas; jis gali būti apibūdinamas tokiais pažymiminiais, kaip garsumas, tembro dimensijos (šviesumas, garso atakos kokybė, harmoniškumo laipsnis) ir trukmių disonansas (žr. Stockhausen 1959).

Straipsnyje nagrinėjamas Andriaus Maslekovo *Incantation of the Freezing Haze* fleitai solo (2013) – kūrinys, kuriame sąmoningai plėtojamos vertikalios kvazimelodinių darinių savybės. Šiuo kūriniu iliustruojamos diagonalijų sonorinių struktūrų darybos ir jų struktūrinio organizavimo alternatyvos.

## Apie autorius / About the authors

**Rimantas ASTRASKAS** (b. 1954) is Assoc. Professor of Ethnomusicology at the Lithuanian Academy of Music and Theatre. He graduated from the Lithuanian State Conservatoire with an M.A. in musicology (1978) and completed his PhD at the Lithuanian Academy of Music (1993). After his internship at the University of Oxford and folklore archives in Copenhagen and Bergen (1995) he is lecturing at the Academy. A guest lecturer at the universities of Copenhagen, Bergen, Tampere, Helsinki, Castellon and London (SOAS), UNESCO expert of Intangible Heritage, Vice-chairman of the Lithuanian National Committee of International Council for Traditional Music, member of the European Seminar in Ethnomusicology (2002–2005 CORD member), Astrauskas is the editor of ten books of selected papers including “Ritual and Music” (1999), “Ethnic Relations and Musical Folklore” (2002), “Traditional Music and Research in the Baltic Area” (2005), “M. K. Čiurlionis and the World” (2005–2012). Scholarly interests include Lithuanian traditional ritual music, theory and history of ethnomusicology, methodologies of research, safeguarding, semiotics of music.

**Zita BRUŽAITĖ** (b. 1966) graduated from the Composition class of Prof. J. Juzeliūnas in 1993. Since 2003, she has been teaching at universities of Lithuania, among them Kaunas University of Technology and the Lithuanian Academy of Music and Theatre; currently holds the position of Associated Professor at Vytautas Magnus University in Kaunas. The scope of her lectures encompasses music composition and works of Lithuanian composers, traits of identity. Since 2009, she has been the chairperson of the Lithuanian Composers' Union.

**Lawrence DUNN** is a composer and writer, improviser and pianist, working for his doctorate at the University of Huddersfield. His music has been performed by the Aurora Orchestra, BBC Symphony Orchestra, Oliver Coates, Robert de Bree; programmed by concert series 840 and Bastard Assignments; installed at the Whipple Museum of Science. He has presented conference papers on Music and/as Process, the Symposium on Acoustic Ecology. He also teaches schoolchildren.

**Charris EFTHIMIOU** (b. 1978 in Greece) holds an MA in composition at the University for Music and Performing Arts in Graz (KUG); PhD on Mozart's early symphonies; from 2012 to 2014 senior lecturer on music theory and music history there. Since 2014, senior scientist. Monographs on Metallica's riffs and Mozart's early symphonies. Publications on Richard Wagner, the symphonic work of A. Honegger, L. Janáček, J. S. Mayr, trio sonatas of J. L. Krebs and on Heavy Metal (*Iron Maiden*, *Nightwish*, *Manowar*, *NWoBHM* and *Black Metal*).

**Rimantas JANELIAUSKAS** (b. 1947), Prof. Dr., composer, pianist and pedagogue; 1962–1966 studied at Kaunas Secondary School of Art; from 1966–1973 at the Lithuanian State Conservatory, piano class of Prof. J. Karnavičius, in 1973–1978, composition class of Prof. J. Juzeliūnas. From 1979–1980 he improved his skills at the Department of Composition. In 1983 he submitted his thesis “Aspects of Functional Dynamics in the Work of Contemporary Lithuanian Composers” and was awarded a doctor's degree. In 1989 a concert of his works was arranged. Currently Janeliauskas holds the position of Professor at the Department of Composition of the Lithuanian Academy of Music and Theatre, teaches theory and composition of music. The composer's theoretical interests are focused on systematics of the principles of composing. He has organized fifteen international conferences on musicology, edited and issued the publications “Principles of Music Composing” (2000–2015) and series of research papers on the cycles of Čiurlionis' music in Lithuanian and foreign languages. He has written a monograph

“M. K. Čiurlionis' Unidentified Musical Cycles” (2010), which was awarded as the best work of Musicology in 2010 (V. Landsbergis Prize). Among the composer's best works are Symphony, Quartet, Triptych, Sonata for piano, Sonata for violin and piano, “Gintarėliai” for piano etc.

**Inga JANKAUSKIENĖ** is a Doctor of Arts, senior researcher at the Lithuanian Culture Research Institute (former the Institute of Culture, Philosophy and Art) in Vilnius, Lithuania. She graduated from the Lithuanian Conservatory (presently the Lithuanian Academy of Music and Theatre) in 1987. Jankauskienė defended her PhD thesis *Narrativity in Music. Operas by Bronius Kutavičius* (1996) there. Jankauskienė has worked as a senior researcher at the Institute of Culture, Philosophy and Art in Vilnius since 1990. 1992–1994 Jankauskienė was in post-graduate studies under Prof. Eero Tarasti in the Department of Musicology at the University of Helsinki. She has been a member of ISI (The International Semiotics Institute) since 1992. Jankauskienė took part in the activity of the International Research Project on Musical Signification and in the congresses of ISI in Paris, Imatra, Aix-en-Provence, Vilnius, Kraków (Poland, 2010). Some articles by Jankauskienė were published in the selections of *Acta Semiotica Fennica*. She has written articles on Lithuanian music history in the Prewar (1918–1940), Postwar (1940–1970) periods of the 20th century, and contemporary music. She has written the monograph *Pagoniškasis avangardizmas: Teoriniai Broniaus Kutavičiaus muzikos aspektai*, 2001 (Pagan Avant-Garde: Theoretical aspects of music by Bronius Kutavičius) and the selection *Broniaus Kutavičiaus muzika: Praeinantis laikas*, 2008 (Music of Bronius Kutavičius: The time which passes). She is the author of publications on the symbol studies, lexemes of culture-nature in M.K. Čiurlionis and B. Kutavičius, symbiosis of tradition and novelty, open forms of compositions by B. Kutavičius, etc. Jankauskienė takes part in the international congresses of Numanities ICoN in Kaunas, conferences on Principles of Music Composing, Čiurlionis days in Druskininkai, etc. She is a member of the Lithuanian Composers' Union.

**Baiba JAUNSLAVIETE** is a researcher and assistant professor (musical form programme) at the Jāzeps Vītols Latvian Academy of Music. In 1993, she received a doctoral degree for the thesis *Closing of the Musical Composition in the 20th century*. Her scientific articles are published in Latvian, Lithuanian and German journals. The articles are devoted to topics of musical forms, semantics, contemporary Latvian composers (Pēteris Plakidis, Maija Einfelde, Romualds Kalsons etc.) and their stylistic influences.

**Liudmila KAZANTSEVA** is a Professor at the Department of History and Theory of Music of the Astrakhan Conservatory and Volgograd Institute of Art and Culture, the Head of the Laboratory of Musical Content. She has earned degrees from the Gnessin Musical Pedagogical Institute (now the Academy of Musical Arts), Graduate School of the Leningrad Conservatory (Candidate of Arts 1984 – “About content peculiarities of musical works with thematic borrowings”) and the Moscow Conservatory (Doctor of Arts 1999 – “The Author in the Musical Content”). She is the author of a number of books and articles (more than 190) on the topic of musical aesthetics in the scientific collections and journals (“Music Academy”, “Music Scholarship”, “Soviet Music”). Her theoretical concept of musical content, presented in her books *Basics of Theory of Musical Content* (Fakel: Astrakhan, 2001. 368 p.; 2. ed. Volga: Astrakhan, 2009. 367 p.), *The Author in the Musical Content* (RAM named after Gnessin: Moscow, 1998. 248 p.), *Musical Content in the Context of Culture* (Fakel: Astrakhan, 2009. 367 p.) and other publications, has been introduced into pedagogic practice in Russia. In the years of her pedagogical work, Dr. Kazantseva has created a school of prominent musicologists. She has been awarded

with numerous prizes of the all-Russian competitions of scholarly papers. Dr. Kazantseva is a participant and organizer of Russian and International conferences, including I–VIII Scientific Readings on the problem of musical content, the editor of scholarly publications and site [www.muzsoderjanie.ru](http://www.muzsoderjanie.ru), a member of the International Informatization Academy and Russian Academy of Natural History, the Composer's Union of the Russian Federation.

**Chad LANGFORD** is a composer and performer, originally from Montana, US. His music explores a visceral synthesis of layered pulse streams, interference patterns, texts, and fragile melodies, frequently utilizing both acoustic and electronic instruments. He has recently been featured in the ZEPPELIN Festival (Barcelona and Zaragoza), Adelaide Festival (AUS), Festival Neue Musik (Lüneburg), *Insomnia* Festival (Tromsø), *KoMA '6* Festival (Belgrade), as well as the *Gaudeamus Music Week* (Amsterdam & Utrecht), and the *November Music Festival* (Den Bosch). After settling in the Netherlands in 2007, he was privileged to work with the pioneering Dutch electroacoustic group the POW Ensemble, as well as undertaking collaborative projects with *Rosa Ensemble*, *Post & Mulder*, *Duo Dubbelduet*, *Ensemble Royal*, *Klarinetensemble Lignum*, and the *ASKO|Schönberg Ensemble's Ligeti Academy*. He is currently an Associate Member of the London Symphony Orchestra's *SoundHub* initiative for emerging composers. He holds degrees in composition and music education from institutions in the US, the Netherlands, and the United Kingdom: *BMusEd* (Montana State University, 2000); *BMus & MMus* (Royal Conservatory of the Netherlands, 2009 and 2011); *PhD* (University of Durham, UK, 2016). He is an Associate Fellow of the Higher Education Academy (UK). As of 2012, he has been living and working in the wilds of North East England.

**Markos LEKKAS** studied Composition at York University (BFA) and at the University of Toronto (MusM and MusDoc). Among his analytical projects were the music of Berg, Brahms and Bach. He teaches Music Theory and Analysis.

**Cécile Bardoux LOVÉN** is a senior lecturer (Stockholm University); Researcher (Project research grant from the Swedish Research Council) (2014); Associate research fellow (IREMus Institut de Recherche en musicologie, Paris-Sorbonne/CNRS) (2013–). *PhD* in musicology (Stockholm University and Paris-Sorbonne University) (2013). The main publications: “Une méthode synchrétique pour l'analyse mélodique d'oeuvres suédoises des années 1940”, *Éditions Delatour France*, 16 s. (forthcoming peer-reviewed article; 2015), Herman Berens, *Erstes Gesellschafts-Quartett Op. 23* (critical edition), *Swedish Musical Heritage* [forthcoming] (2015), Karl-Birger Blomdahl et Ingvar Lidholm: *Enjeux mélodiques, tonals et organiques des années 1940* (*PhD Dissertation*), *Studies in musicology* 22, Stockholm University, 623 s. (2012).

**Andrius MASLEKOVAS** (b. 1985) is a composer of the youngest generation and critic of contemporary music. As a composer he is mainly focused on the timbral aspect of acoustic music. His compositions are performed by various ensembles, choirs and orchestras in Lithuania and abroad. As a critic he was awarded the prize of Lithuanian Writers' Union for a review of the year, which covered the 20th anniversary of contemporary music festival *Gaida 2010*. He completed his M.A. studies with Marius Baranauskas in 2012. Since 2012, he has been a doctoral student at the Lithuanian Academy of Music and Theatre preparing a thesis about sonoristic music.

**Rytis MAŽULIS** graduated from Prof. Julius Juzeliūnas' composition class at the Lithuanian Academy of Music in 1983. In 1988 he won the Tyla Prize for his chamber piece “The Sleep”, and in 1989 he was awarded the Lithuanian Culture Fund Prize for chamber and vocal music. Mažulis received a scholarship from the Akademie Schloss Solitude, Stuttgart, for a period from September 1998 to April 1999. He was twice awarded the prize for the best vocal

composition (“*ajapajapam*”, 2002; “*Form Is Emptiness*”, 2006) at the competition organized by the Lithuanian Composers' Union. In 2004 he was awarded the Lithuanian National Prize. In 2006–2013, he was Head of the Composition Department at the Lithuanian Academy of Music and Theatre. His' works are stylistically pure, frequently using canonical techniques and concentric forms. Because these compositional techniques need the right instrumentations to make a homogeneous and crystal-clear sound Mažulis usually writes for ensembles of equal voices or for all keyboard instruments. These pieces are either performed live or when his music is impossible to perform with conventional instruments it is realised with computer, treated as a kind of super-piano. For example, in his piece “*Palindrome*” there are microtonal pitch gradations, non-standard divisions of rhythmic values and the simultaneous pulsing of different tempos. His “*Clavier of Pure Reason*” also cannot easily be performed live, but for a different reason: it needs an ensemble of at least 24 pianos. Mažulis's works are not just stylistically pure; they also show a subtle sense of humour.

**Sigitas MICKIS** (b. 1969) embarked on a musical career in composition in 2003 after having performed as a professional piano player for more than a decade. He studied composition with Prof. Vytautas Barkauskas and Dr. Rimantas Janeliauskas at the Lithuanian Academy of Music and Theatre from 2003 to 2008. He also took an international course for composers in Trebnitz, Germany. In 2014, he started his doctoral studies at the Lithuanian Academy of Music and Theatre preparing his thesis “*Projection of Creative Phenomena in Musical Composition*”.

**Ramūnas MOTIEKAITIS** studied composition at the Lithuanian and Norwegian academies of music. He pursued and completed his doctoral studies at the University of Helsinki (2011). During 2008–2010, with the support of the Japanese Ministry of Education, Motiekaitis worked as a researcher at Musashino Academy of Music in Tokyo. During 2013 and 2014 with the support of the Canon Foundation in Europe he continued research at the Nanzan Institute for Religion and Culture in Nagoya, Japan. Currently Motiekaitis lectures on Japanese philosophy at Vilnius University, on East Asian Buddhism and Arts at Vytautas Magnus University and on aesthetics at the Lithuanian Academy of Music and Theatre. In 2012 Motiekaitis was awarded the Vytautas Landsbergis Prize for his monograph *Poetics of the Nameless Middle. Japan and the West in Philosophy and Music of the Twentieth Century*. Research interests: semiotic theories, metaphysics of Buddhism, philosophy of the twentieth century, Japanese aesthetics, and its contexts.

**Manos PANAYIOTAKIS** was born in Heraklion, Crete, Greece in 1982. He studied musicology at the University of Athens, theory of music with Dimitri Sykias, flute with Iwona Glinka and composition with Theodore Antoniou at the Musical Horizons conservatory in Athens. In 2007–2011 he studied composition with Thomas Simaku for a Master's and a *PhD* degrees at the University of York, funded by IKY (State Scholarships Foundation). Member of the Greek Composers' Union, he currently teaches at the Music Department of Aristotele University of Thessaloniki (Greece). At the same time, he teaches theory of music at the Colours Conservatory. He has collaborated with various performers and ensembles in Greece, the United Kingdom, the United States and other countries. His works have been performed in several cities, among others Vienna, York, Manchester, Boston, Munich, Venice and Athens. He has also presented various papers on contemporary music at conferences in Lithuania, Ireland, Greece and Cyprus.

**Dimitris PAPAGEORGIOU** (b. 1984) is a violinist, improviser and composer from Athens, currently based in Edinburgh. He has a diploma (ptychion) in violin performance, and diplomas in advanced music theory (harmony, counterpoint, fugue) from Greek conservatories. He also holds a *BSc* in physics from the National and Kapodistrian University of Athens, and has a bachelor thesis on the mathematical models that Iannis Xenakis applied in his music.

In 2012 he completed with distinction the MMus in composition from the University of Edinburgh and since then he has been studying towards a PhD in music (composition) at the same University. His research explores dialogues between composition/improvisation, Western/Eastern musical practices and aesthetic viewpoints, as well as the interactions between acoustic and electronic sound structures. His compositional output includes solo, chamber, orchestral, electroacoustic, and electronic music. As a violinist he has performed a range of styles and idioms, both in solo projects and in various ensemble formations, ranging from Western Art music, Greek folk/Minor Asia music, Jazz/World music, and free-improvisation. As an improviser, he creates sounding textures by re-examining and extending the sound making possibilities of his violin, and by reviewing modal improvisation practices, with a special interest in Middle Eastern *makam* music. He has presented his work in Britain, the Czech Republic, Greece, Italy, Switzerland, and New York.

**Pathorn Bede SRIKARANONDA de Sequeira** – composer, saxophonist, and music educator, got his M.A. degree in music composition at Yale University in 1996 and his PhD at the University of Edinburgh in 2001. His first major commission, Piano Quintet, was commissioned in 1996 by the German Embassy to commemorate the 140th Anniversary of Friendship between Germany and Thailand. In 1997, his song cycle *Fonram... Baimairuang* was commissioned by Queen Sirikit as a requiem for her entourage who died in an accident. In 1998, his *Portrait of Siam* for alto saxophone and piano was premiered in Budapest and won the Lyra Prize. In 2001, he completed his first opera, *Ngau P'a*, the very first one to use a Thai libretto. Srikanonda's recent works include *E se mais mundo bouvera, lá chegara...* for baritone, chorus and orchestra, commissioned by the Portuguese Embassy to commemorate King Bhumibol's Diamond Jubilee and subsequently chosen as the anthem for the Luso-Thai Quincentenary Commemoration in 2011. A wind orchestra piece, *Lux Aeterna* was commissioned by the Kasetsart Wind Symphony in 2009. In 2012, his jazz suite, *En Elephantine Ballad* commemorating the 50th anniversary of Thai elephants at the Copenhagen Zoo, was premiered before HRH Prince Henrik the Prince Consort in Copenhagen. In 2014 another wind orchestra piece, *ASEAN Portrait*, was commissioned by Kasetsart University for the inauguration of the ASEAN Economic Community (AEC). His second opera, *Pero Vaz de Sequeira*, is scheduled to premiere in 2017. Srikanonda is an associate professor at Kasetsart University in Bangkok, Thailand and has served the King of Thailand in his various musical activities since 1988.

**Kalliopi STIGA**, born in Athens (Greece), studied piano in the Conservatory of Athens, and Musicology at the Ionian University of Corfu (Greece), Université de Paris IV-Sorbonne (France) and

Université Lumière-Lyon II (France), taking a Diploma, D.E.A. and PhD in "Literature and Arts" respectively. Her PhD thesis is entitled "Mikis Theodorakis: the poet who brought 'savant music' and 'popular music' together". For her research, she was honored with a prize and a grant from the Gazi-Triantafyllopoulos Foundation in 2002. In 2010, she was qualified as 'Maître de Conférences' by the French National Council of Universities (CNU). Since September 1998, she has been an established music teacher in Greece. She worked in the Department of Musicology in the National and Kapodistrian University of Athens (2007–2010) and in the Department of Primary Level Education of the Democritus University of Thrace (2010). Her research interests are in the fields of sociology of music and of history of Greek contemporary popular music. She gives lectures in Greece and abroad, writes articles in musicological revues and she participates in International Conferences (Portugal, France, Lithuania, Mexico, Canada, Serbia, UK, Finland, Latvia, Cyprus, Belgium, Turkey and Algeria). She is currently working at the Institute of the Educational Policy of Greece as Consultant for Music.

**Martin VISHNICK** holds a PhD, MSc, LLCM(TD), ALCM, is a guitarist, composer, teacher, and researcher. Performer concert tours have taken Martin all over the globe, where he continues to promote his albums with radio and concert appearances; this includes varied Classical guitar and Electric guitar concerts and engagements. His Wigmore Hall and Purcell Room debuts were back in 1981. Commissions include music for theatre, concert hall, film and media; his first published work was Four Pieces for Solo Violin Edwin Ashdown (1977). He also teaches guitar and composition. His former appointments include Junior Music School at the London College of Music, Thames Valley University, head of guitar and composition, and St Helen's School, Northwood, Middlesex. Moreover, from 1995–2008 he was Composer in Residence at St. Albans School, Herts. LLCM(TD), ALCM Guitar from London College of Music 1974, the subsequent composition studies with Richard Stoker (at RAM) 1977. He holds an MSc in composition from the University of Hertfordshire 1998, and a research PhD from City University 2015. The research comprises two contrasting volumes, a survey of current practice and didactic elements. In both volumes, the focus is on exploring the complex processes of musical creation and reception. Martin is now concentrating on propagating post-doctoral research, testing theories and principles expounded in his PhD dissertation. He is currently involved in post-doctoral research, propagating his work in the contemporary 'sound art' music scene, providing guitarists and composers with a sound repertory for compositions and improvisation, based on extended techniques that comprise both developments of existing techniques and techniques invented by the author.