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MUZIKOS KOMPONAVIMO PRINCIPAI: kūrybos procesas

PRINCIPLES OF MUSIC COMPOSING: Creative Process

V

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Turinys / Contents

Pratarmė

Šis leidinys sudarytas iš mokslinių straipsnių, perskaitytų Penktojoje tarptautinėje muzikos teorijos konferencijoje „Muzikos komponavimo principai. Kūrybos procesas“, surengtoje 2005 m. spalio 13–15 d. Vilniuje. Konferencijos prelegentai ypač aktyviai atsiliepė į tris konferencijos potemes: pirmoji – kompozitoriaus kūrybinio proceso specifika, antroji – kūrybos pobūdis ir kompozicija; trečioji – kūrybos proceso tipai ir tipologijos.

Konferencijos rengėjai – Lietuvos muzikos ir teatro akademija ir Lietuvos kompozitorių sąjunga. Konferenciją parėmė Lietuvos Respublikos kultūros ir sporto rėmimo fondas, o leidinį – V. Landsbergio fondas ir Lietuvos muzikos ir teatro akademija.

Pirmajai potemei priklauso pranešimai, kuriuose siekiama paaiškinti, kas yra kompozitoriaus kūrybos procesas ir jo specifika. Pasak pranešimų autorių, tai gali būti: rinkimas (D. Račiūnaitė-Vyčinienė), komentavimas (M. Katunyan ir A. Žiūraitytė), fiziologinis stimulas (L. Stefanija), *yin* ir *yang* (S. K. de Ghize), morfogenezė (M. Szoka), *morphopoiesis* (P. A. Kokoras).

Antrajai potemei priklauso tie pranešimai, kuriuose siekiama paaiškinti kūrybos proceso pobūdį: kūrybos procesas, skiriantis ypatingą dėmesį laiko ir vaizdinių sąsajai (D. Ungar), skaičiui ir matematikai (R. Povilionienė), audiovizualiniam vaizdui (M. Wesley-Smith), komponavimo ir atlikimo vienovei (P. Roe), individualiai dermei (K. Slutskaya-Levine), kryptingumui ir dinamikai (F. M. Pastor). Kiti autoriai kūrybos procesą aiškina remdamiesi muzikos fragmentu (S. Downes), kūrinio sukūrimu iš kito kūrinio (Shuann Chai), savaiminga kompozitoriaus minties plėtote (R. Janeliauskas).

Trečiąją potemę analizuoja trys pranešimai: P. Ramshaw, remdamasis H. G. Gadameriu, kompozitoriaus kūrybos procesą bando pagrįsti hermeneutiniu ciklu, t. y. savita autorefleksija, kuri privaloma improvizuojant; N. Schüler pristato O. Laske's idėją sukurti muzikinio intelekto modelius, imituojančius kūrybos procesą; R. Janeliauskas tipologizuoja kompozitorių kūrybos procesus pagal archetipinius „gimdymo“, „įgijimo“, „darymo“ ir „spontaniškos veiklos“ motyvus.

Leidinys turėtų būti įdomus kiekvienam, kuris domisi kompozitoriaus kūrybos procesu ir kūrybiškumo klausimais. Redaktorių kolegija tikisi gausaus skaitytojų rato tiek čia, Lietuvoje, tiek ir užsienyje, ji bus dėkinga už visus atsiliepimus ir pastabas apie šią knygą, kuriuos prašome siųsti elektroniniu paštu: mbaranaus@yahoo.com

Organizatorių vardu dėkojame visiems leidinio rėmėjams.

Doc. dr. R. Janeliauskas

Foreword

This publication is comprised of scientific reports made at the fifth international music theory conference "Principles of Music Composing: Creative Process" held on 13–15 October 2005 in Vilnius. At the conference, the speakers particularly actively responded to the following three subthemes of the conference: first – the specific character of the composer's creative process, second – the character of creation and composition, third – types and typologies of a creative process.

The organizers of the conference – the Lithuanian Academy of Music and Theatre and the Lithuanian Composer's Union. The conference was supported by the Fund for the Support of Culture and Sport of the Republic of Lithuania, and the conference publication was sponsored by the Vytautas Landsbergis Foundation and the Lithuanian Academy of Music and Theatre.

The closest to the first subtheme were the reports aiming at the explanation of the composer's creative process and its specific character. In the opinion of the reporters, it is possibly: collection – D. Račiūnaitė-Vyčinienė, commenting – M. Katunyan and A. Žiūraitytė, a physiological stimulation – Leon Stefanija, *Yin* and *Yang* – S. K. de Ghize, *morphogenesis* – M. Szoka, *morphopoiesis* – P. A. Kokoras.

The closest to the second subtheme seem to be those ideas of the reports the aim of which is to explain what a process of creation is. The process of creation paying a particular attention to the connection between time and images – D. Ungar, a number and mathematics – R. Povilionienė, an audiovisual image – M. Wesley-Smith, the unity of composing and performing – P. Roe, individual mode – K. Slutskaya-Levine, purposefulness and dynamics – F. M. Pastor. Worthy of mention are also explanations on the basis of the musical fragment – S. Downes, creation of the work from another work – Shuann Chai, a spontaneous expansion of the composer's idea – R. Janeliauskas.

The greatest response to the third subtheme was voiced by three reports. P. Ramshaw, basing himself on H. G. Gadamer, makes an attempt to base the composer's process of creation on a cycle, i.e. an original autoreflection which is obligatory for improvisation. N. Schüler presents Otto Laske's idea to create models of musical intellect which imitate the process of creation. Whereas R. Janeliauskas typologyzes the composer's processes of creation on the basis of the archetypal motifs of "giving birth", "acquisition", "making" and "spontaneous activity".

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

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

Dr. R. Janeliauskas, Ass. Prof.

Daiva Račiūnaitė-Vyčinienė

Sutartinės "Collecting": a Canon and Creative Process

Archaic polyphonic songs named *sutartinės* can be treated as a specific phenomenon of Lithuanian traditional music. It is known that one of the most typical features of traditional culture is an anonymity or creative work in co-operation. That is why when talking about creative processes related to archaic traditional music, it is necessary to analyze not the music only, but the so called corporative memory as well that kept safe the perception regarding relations established between the human being and the supernal world, the human being and the Universe etc. It would be necessary to apply archetypical symbols that are general-purpose, because they "allow to stay in contact" with people of most distant cultures and to help reveal a mechanism of traditional thought as well.

In ancient tractates about culture it was stated that the music contains the ancestors' information, their coded "knowledge". Musical performance as one of sacral areas of *homo religiosus* life was not charged to whoever but to powwows, wizards, astrologers and similar people. Special rhymesters were charged with solemn-ritual music performing. It can be proposed that the first performers of Lithuanian polyphonic songs *sutartinės* somewhere in the past had their own system of poetic and musical formulae suitable for ritual performance. Unfortunately, there are no any written tractates about this kind of music, there no any ancient literary monuments such as written by ancient Chinese "Shii czin" ("Book of Songs"), ancient Iranian "Avesta", the Old Testament book "The Song of Songs" and others. The tradition of *sutartinės* is not the written one, it came to us through a lot of generations. Though the strict rules availability related to composing and performing are proved by the *sutartinė* structure itself, specific performing features and folklore terminology.

Many people while listening to the *sutartinės* for a long time or while performing them, can feel a special and strange hypothesizing influence of constantly repeating refrains (it reminds of non-stop repeating eastern mantras). It can be noticed that the *sutartinės* refrains are often based on different forms of the same words-refrains (it is a kind of playing on sound consonances): *tatatõ-tõtata*; *rõtile-ratiłėl-ratiliõ; siudija-siudijõ-siudijula tatatõ*; *dõbile bite*, *dabiłėli*; *tūto tūto tūtava; siuli siulingėla* etc. It can remind distant associations with poetics of Indian "Rig-Veda" where according to Tatyana Yelizarenkova, "a word to be expressed at a consonance level is a usual name of God or "a message" to be forwarded to Gods that has been divided into separate elements by a poet, namely into sounds and their combinations, syllables, morphemes [...]"[1]. Here it would be possible to remember refrains being common for *sutartinės*, such as *laduto laduto; ladotõ; lõdata lõdata; lado lado tatatõ* and similar. *Lado, lado* singing was mentioned in description of the Great Duke Algirdas returning back to Vilnius after successful battles in about 1368–1372 m.[2] The mentioned imitative word *lado* (or its modifications) was used from ancient times while playing with a child – when a child was clapping: "*lad lad ladytį ladytį*, *duos mamutė cicytį*, *cicytį*..."[3]; "*katu katu katutes*, *ladu ladu ladutes* ..."[4] and similar.

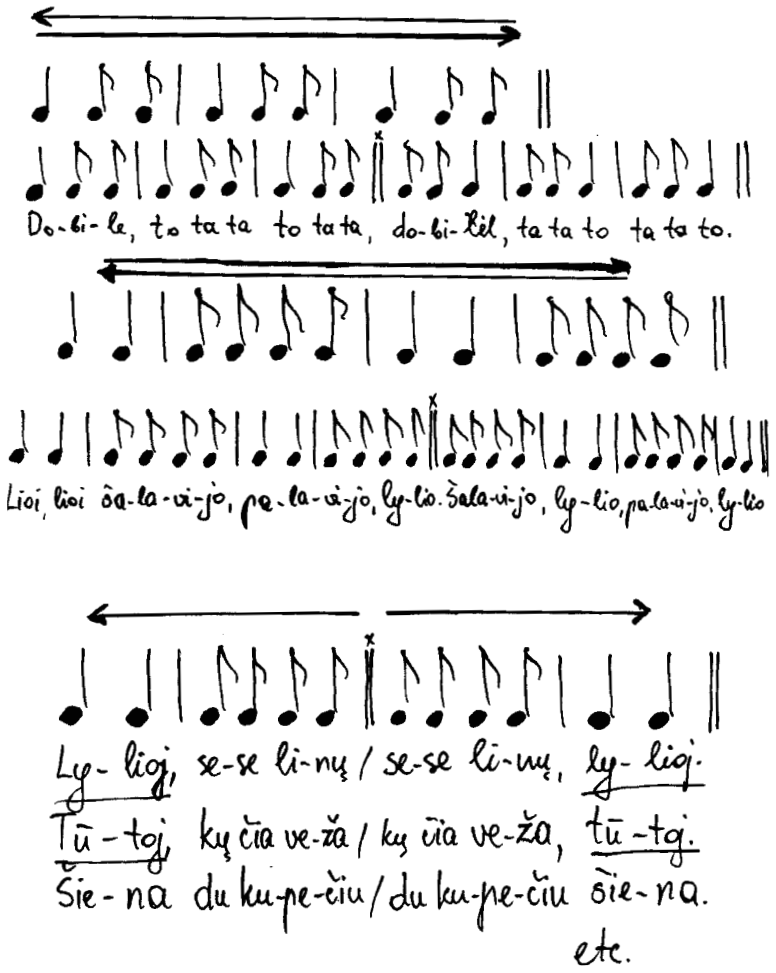
According to research carried out by a mythology specialist Norbertas Vėlius it is possible to state that in the past the word *lado* in refrains of Lithuanian *sutartinės* was not only a meaningful one, but it might have a sacral and mythological meaning as well.[5] Therefore, it is possible to state that *sutartinės* by a significant number of similar refrains (and in the past – by undoubted their meaningful significance) can be treated as similar to Sanskrit mantras by which a god's name's syllable was honoured (or the sound expressed was related to appropriate God). Though in fact, some refrains from the first sight might be based on a play on separate imitative sounds that is why it is hardly ever possible to restore their semantics. In similar way the play on words is treated by Yelizarenkova mentioned, "...thanks to non-stop and persistent play on anagrams a text of "Rig-Veda" in general cannot be "explained" or "understood" synonymously, but they only could be treated in different ways"[6].

According to Vladimir Toporov, this tradition of words' segmentation was common for Indo-European poets. It could be further developed by obtaining plumier features (as in Indian-Iranian,

Greek, Celt, German and other poetic traditions[7]). It would be possible to remember canonized poetic means of the Early Middle Ages (philides' and bards' later) a syllable metathesis and words inversion. It is necessary to attract attention to palindrome as well (gr. *palindromeo* means "I run back") – a word, phrase or a poem line that can be read equally from the left to the right and otherwise, for instance: *sūnūs* or *sėdėk užu kėdės*.

It possible to propose that similar laws on segmentation, rearranging or reverse reading might have roots in archaic ritual music, i.e. in Lithuanian *sutartinės*. It is necessary to remember a syncretism of poetry and music of the past to prove the aforementioned thought (it is necessary to have in mind that mantras were expressed by recitative as a special way of singing). By the way, similar phenomenon were noticed later in professional music as well – it is a retrograde imitation (retroversion, "crayfish") imitation. The similar mirror reflection principle was a base for musical composition of most *sutartinės*. Though actually, in most cases only the *sutartinės* music can be read otherwise, i.e. regarding its rhythm formulae (LLIM 20; 15 etc.). There are some examples where the whole piece of *sutartinės* is based on the mirror reflection principle (it means, its music, i.e. the rhythm formula and the text) (SlS 210a, b, 212; LLIM 10, 11 etc.; Example 1):

Example 1

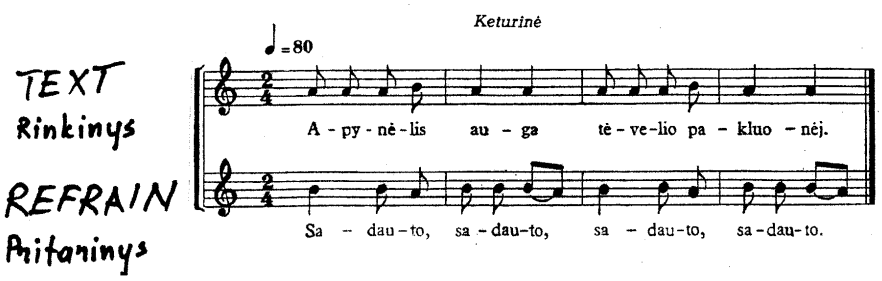


I think that this principle of the *sutartinės* music composition should not be treated as a very simple one as it could be explained by musicologists as based on rules of complementary rhythmics. It is known that from the ancient times, different sacred scripts were written and sacred (magic) texts were read back to front, for instance "abracadabra". In similar way the Egyptian hieroglyphs were written: not only from the top to the bottom, but from the left to the right as well (by the way, the hieroglyph writing was an area designed for powwows only)[8]. Runes were written in different ways as well: from the right to the left, from the left to the right and by boustrophedons (we would be able to find similar writing principles in the *sutartinės music* as well).

It is interesting that the similar principle forward-back is common for the process of weaving (according to mythological conception, weaving is one of the means that helps turn the chaos into the cosmos). In "Rig-Veda's" a weaver was often treated as a language creator-poet. Weaving where Gods are participating has been symbolically related to sacrificing: "by one hundred and one action designed for Gods it shall be sacrificed (lit has been woven by parents arrived). They are sitting by the sacrifice stretched saying: "Weave forward, weave back"[9]. It is seen that the principles of weaving (in this case the sacral weaving) and holy language are the same: forward-back. In *sutartinės*, this forward-back singing of the rhythm formulae by several voices shall create a one-piece musical cloth (the cloth again). Is it possible to find here any correlation? Obviously, here it would be necessary to briefly analyze the most important links established between the process of creation of the *sutartinės* performers-collectors and terminology of weaving-knitting.

First of all, let us pay attention to folklore terminology that shows old *sutartinės* singing traditions as well as the singers' canonized view to the performance of these songs. Impressive sayings: "*vieną barą varant, vienas est vadovu, o kitą barą – suokėju*" ('pushing forward a stanza, one is the leader, but for another stanza – the warbler (*suokėjas*)', SlS 1194); "*Pirmoji pora vis vedžioja, o antroji pora* seka *pirmosios žodžius*" ('The first pair always leads, whereas the second pair follows the words of the first', SlS 770) and others prove the essential issue – how the singers divide up their work into recitative – text development (collecting, reading, saying, counting the beat, inventing, etc.) and the refrain singing – "an acoustic shaping of the text" (warble, agreement, advise, beat etc.; Example 2). An opposition: reciting (saying, expanding on the contents of the text) / singing (*giedojimas*) is known in most archaic traditions[10] as well as until now in musical traditions of different African tribes[11].

Example 2



It is possible to propose that the right to change (i.e. to compose) the text might formerly be provided to a leader(s) of ancient rituals. It would be proved by names of the main singers: a leader of Lithuanian *sutartinės* is called *rinkėja*, *sakytoja*, *rokuotoja*, *sumisliautoja*, *vadovė* (collector, teller, counter, inventor, leader).

TEXT **Reciting** (expanding on the contents of the text)	**REFRAIN** **Singing** (a peculiar kind of sound formation)
rinkimas *sakymas* *rokavimas* *sumisliavimas* *vadovavimas* *vedimas* etc.	*giedojimas* *pritarimas* *patarimas* *suokimas* *pridaužimas* *padaužimas* etc.
'collector'	**'accomponist', 'hymner or chanter'**
rinkėja *sakytoja* *rokuotoja* *sumisliautoja* *vadovė* etc.	***pritarėja*** *giedotoja* *patarėja* *suokėja* *pridaužėja* etc.

A singer named *rinkėja* ("collector") singing the main text or the singer to begin *sutartinė*. She was collecting, i.e. composing the words of songs (sometimes *sutartinės* themselves were called *rinktinės* – "collected").

Sutartinių rinkimas ("*sutartinės* collecting" – a term of performers) is in accordance with weaving process terminology: *rinkinys* (the set) is one of *sutartinės* parties, namely, a meaningful text of *sutartinės* (collect the set as it was made up) and "patterned cloth, – pattern". According to traditional conception, *rinkimas* ("collecting") means writing art pieces by pattern writing, i.e. collected fabrics (patterned fabrics – ribbon, etc.) technology, according to meaning of the word collection itself "weaving pattern" (by the way, knitting loops are also to be collected).

In the past, creating of poetry, songs was often called trade, sometimes weaving terminology was used, for example: *t(h)-ek(h)s* – the essence of "to manufacture", "to twine", "to process", "to mould" shall be "to form a song", "to compose" (ancient Indian word *taks* means to form a song)[12]. By the way, a Finnish runic traditional performer that is "catching" the main singing is called *säistäja* – "weaving, traggering a song"[13]. It would be necessary to remind that according to old perception, a tradesman (that was provided with creative powers by mythological creations) is not creating by himself, he is repeating operations that were originally performed by supernal creators of the Universe. In similar way, the Great Goddess while spinning or weaving, is performing the act of creativeness, she is arranging, managing the chaos rearranging it into the cosmos"[14]. Often, goddesses were singing while weaving, therefore, singing was treated as magic means as well aimed at chaos transforming into the cosmos. Actions taken by a tradesman – poet – musician provided with creative powers have cosmogonic essence as well.

Singing of Lithuanian *sutartinės* is apparently related to poetic weaving metaphor when it is *collected*, *written, patterned* in a special way = while composing the text (and melody), evidencing archaic roots of *sutartinės* traditions.

The essence of the name of *a collector* is similar to a term *sijātāja* that means a leader of Latvian ancient songs – "sijotoja" (from Latvian word *sijāt* – "to sieve"*). Sijotojas* – a person involved in sieving, also in collecting, especially in *selecting*[15]. Here it would be necessary to remember "Rig-Veda's" poets-sages that have sieved their songs: "to separate grains from ryegrass" – is a common image in "Rig-Veda" applied to select the most suitable words for sacred language[16]. By the way, one of the meanings of the Lithuanian word *rinkti (to collect)* besides "to sing *the set of sutartinės*" and "to make patterns while weaving" is to look for suitable thing to separate the sutibal thing from a lot of things".

Similar meaning can bee noticed in tradition of early Japanese poetry. A verb *jomu* (to read) for a long time meant "to sing", "to read in singing manner, vowels", "to put together, to create"[17]. However, the same verb *jomu* had a meaning "to count" as well (in Lithuanian *skaityti-skaičiuoti*, "to read-to count"), in wider sense to "regulate" in general.

Creation and performance of early Japanese poetic form *tanka (uta)* was also named *jomu* and was related to cosmogony – the world shall be classified by this way, a relation between the subject (creator, performer) and the object shall be regulated. *Uta-o jomu* "to put together (to create), to perform *tanka*" might mean "to calculate a song" and "something to be regulated by a song", i.e. to arrange, harmonize the world according to appropriate tune, rhythm[18].

The same idea is hidden in the name of Lithuanian *sutartinės*, isn't it? It is known that *sutarti* (to agree) does not mean to come to agreement, consent, to be amicable, it also means "to coordinate" or to tone. It is possible to presume that while Lithuanian were singing *sutartinės* as any other nations were performing their ritual music they tried to achieve the sound harmony not because of aesthetic objectives only: harmounious singing, i.e. "correct" was the only way to apply to Gods. Any, even the slightest deviation from the ritual music canons is prohibited[19].

In most ancient traditions (let us remember ancient Greeks *ethos*, Confucius' and his followers' teaching), music was treated as having harmonizing powers. Hence, *sutartinės* could be treated as not the singing voices combination only, but as the reference to universal harmony and its manifestation (regarding European music it sounds like a paradox: a harmony of disharmonic intervals – dissonances, seconds!).

By the way, remembering the *sutartinės* concept discussed, it is possible to find shocking typological parallels between the *sutartinės* and incantation tradition of ancient Indians. For example, the

leitmotiv of the latest "Rig-Veda's" hymn X.191, named "Incorporation Hymn" became the root of the word *sám* (it means an idea of uniting, merging as well as agreement: "put together in cooperation!" (*sám gacchadhvam*), "come to consent together!" (*sám vadadhvam*), "agree together!" *sám ...jānatām*) by your thoughts based on the very beginning – "as gods in the past <...> were sitting together in consent..."[20]. Probably, similar ideas refer not to the name of Lithuanian songs *sutartinė*, but to one of the most shortened texts (or maybe its fragments?)[21]:

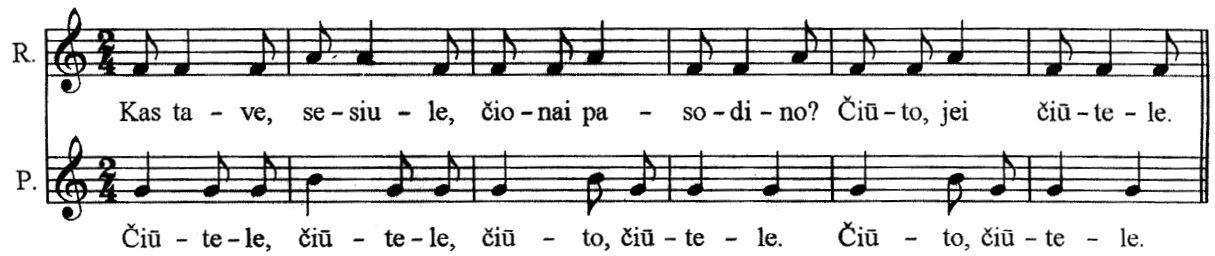
Rimo rimo tūto,
Rimo rimo tūto,
Sutarjėla,
Sutarjėla.

Here, *Rimo* could mean seriousness, calming down, quetness; in one's turn, *rymà* (a long vowel is conditioned by musical stress) – peacefulness; rhyming, thinking while rhyming; *tūto* – probably refers to *tūtuoti* "to toot, to pipe, to trumpet, to sing" *sutartinės*; as well as "to shout in drawling manner, to trumpet" (about swans, geese, cranes); *sutūtuoti – to have tooted* – "to come to agreement", "to have sung", *tūtuoklės* and similar – *skudučiai* (Lithuanian multi-pipe). *Sutarjėla* – "while coming to agreement, tuning, harmonized, by common consent".

The terms discussed would allow to treat Lithuanian *sutartinės* as ritual and their performers as important ritual participants as well as organizers. Therefore, as the "Rig-Veda's" powwows are collecting the words suitable for the hymn creation (their sacred language is treated as the world creating tool), as the ancient Chinese magicians-astrologers are electing (tuning) the tones of the music-ritual scale (i.e. are creating music arranged according to cosmos rules), the *sutartinės collector* when electing the appropriate words and rhythm formulae is participating in musical cosmos harmonization – creating the cosmos harmony.

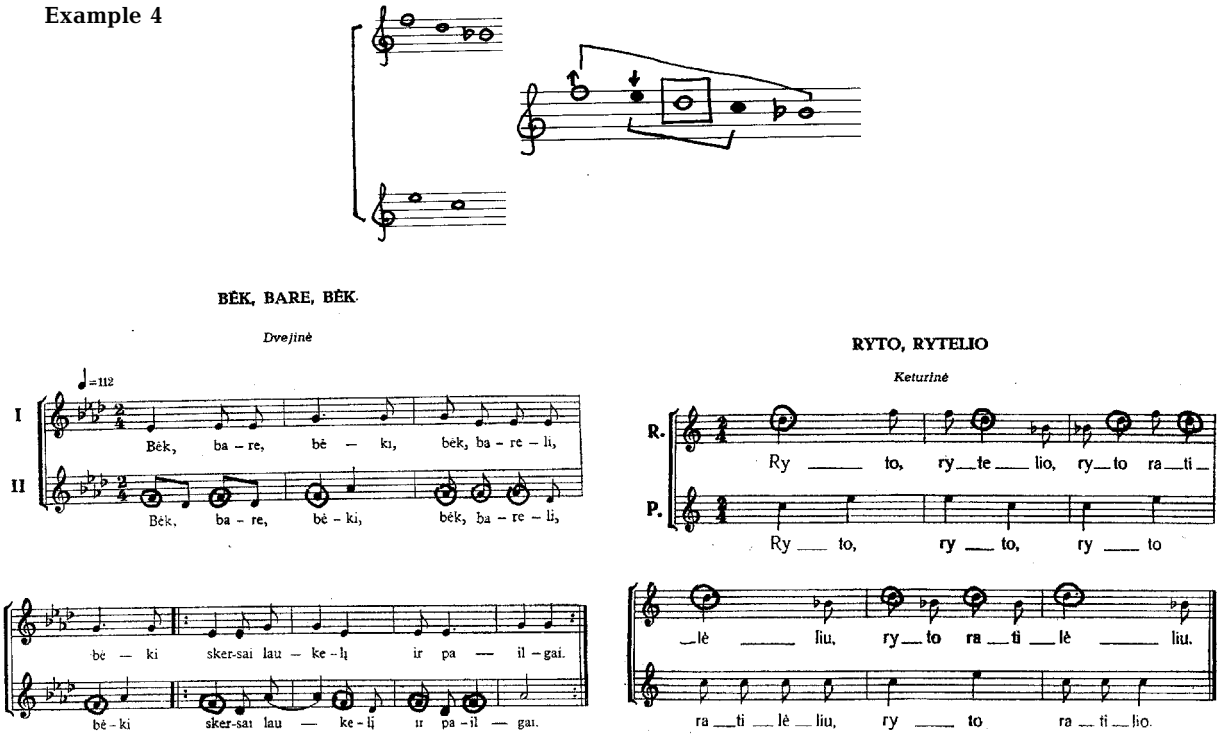
By no doubts, *the sutartinės* collector while creating obey appropriate canons of *sutartinės* music. These canons can be clearly seen in northern *sutartinės* area (in Biržai and neighbouring territories). *Sutartinės* of these territory, despite different performing ways (sung by two, three or four performers), belong to archaic binaric musical system, binarics of *trejinės* ("treeesomes", canon) and *keturinės* ("foursomes", antiphonal counterpoint) only is strengthened by simultaneous two different texts (notional and imitative), and in *dvejinės* – by two performers' polarity that are interpreting different functional areas (according to Lithuanian composer Rimantas Janeliauskas, two sound sexes[22]). Essentially, all these *sutartinės* are based on two bichords or the bichord and trichord tuned up by a second (Example 3).

Example 3



5 tones scale is common for most *sutartinės* of Biržai region (it is possible to propose that it cannot be treated as a coincidence – in this region, *sutartinės* are played by 5 string *kanklės* (Lithuanian zither) or *ragai* ("horns", Lithuanian wooden trumpets) the sets). This scale is an expression of interaction of two neighbouring "moduses" (two binary poles) mutually tuned up by a second interval. A bichord of one "modus" (a third) seems to be framed by a central sound of the other "modus" that turns it into the central point of the whole scale, an axis of crossing (Example 4).

Example 4

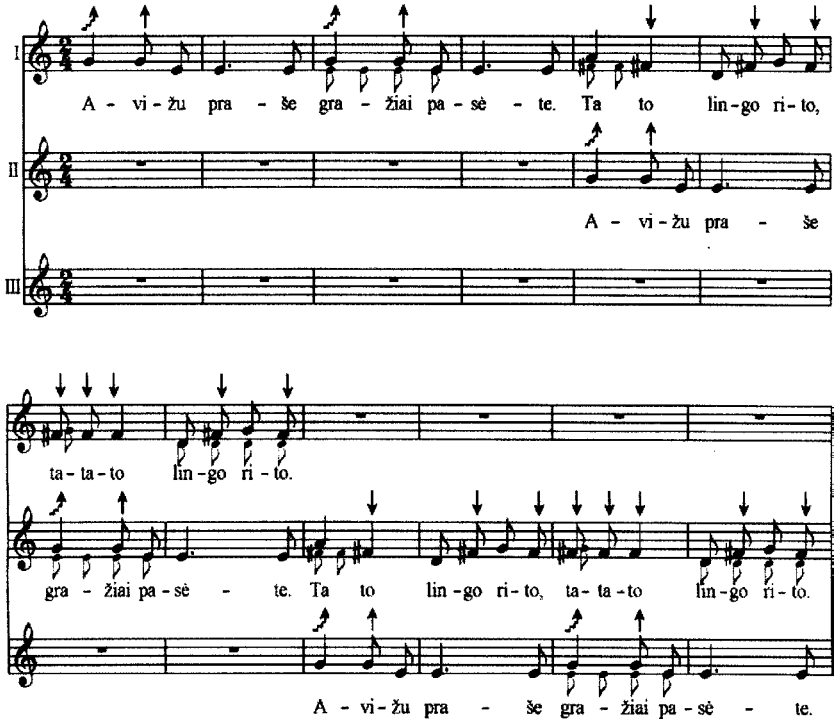


In parallel: aesthetics of the ancient Chinese (5 sounds are treated as a unity of the *yin* and *yang* counter forces of the Universe); Christian cross as the integrity of the world (a vertical and horizontal, the sky and the earth) that consists of four branches and the "cross centre", symbol, etc. A similar idea can be noticed in dancing *sutartinės*: 4 singers are moving in a circle pointing with one hand into the circle centre (this is a symbol of a turning cross or swastika; Example 5). In this central point where all singers' hands are placed) all spiritual energy shall be concentrated.

Example 5

It is important that a trying to come to agreement or sounds mutual tuning up takes part within the same period of time. While singing the *sutartinės* (within the period of the text and melody collecting). Singers are trying to "beat", "clash" voices at their best. My practical experience showed that the best result was reached when sounds are "beaten" when there is a second between them. However, not small or large seconds, as it is written in notes, but middle ones, equal to 1, 78 of tempered semi-tone (it was shown by acoustic measurements carried out by Rytis Ambrazevičius[23]). In order to achieve an ideal sound of voices, often *glissando* shall not be avoided (by this way a distance is increased up to the desired one; Example 6).

Example 6



One interesting issues worth attention is related to the *sutartinės*' voices ought to sound like bells: voices strike like bells. Similar descriptions of the maximum concentration of vocal energy in a narrow area are known in Mediterranean region (in Bosnia, Serbia, Bulgaria, and Epirus). German musicologist Rudolf Brandl thought that possibly singers associated sounding of songs with bells because of similar acoustical features – probably, the bells of old foundry spanned certain spectrum of sounds[24]. Or, maybe, an attempt to "strike" voices (like bells) could be explained by the mythological conception of bell sounding coded by cosmic harmony since ancient times, by ideal order or perfection? It is not surprising that folk singers, when properly "striking" voices compared their sounding with a harmonious ringing of bells. By the way, sometimes, this the performers' aspiration for polyphonic "striking" harmony cannot be expressed by words, but it can be expressed by their behavior.

Example 7

For example, Serbian researchers of polyphonic songs (Dragoslav Devic, Cvjetko Richtman and others) attracted their attention to the fact that when three singers are singing they kept looking at each other (the same manner of singing when the singers are constantly looking at each other during performance of *sutartinės* was noticed by Zenonas Slaviūnas in 1935–1937) (Example 7).

It is possible that appropriate way of *sutartinės* performing (when the singers are gathered in a circle) was conditioned by an open, as if non-endless form of *sutartinės* ("one is collecting words and is able to collect any amount of them"). Beginning = end of the *sutartinės*' music (this conception is common for eastern cultures, and for some African traditions, it cannot be treated as alien in regard with Lithuanian neighbours – archaic Finnish-Ugric as well as Slavic polyphony). However, gathering in a circle can also be treated as a way to create an exclusive in which the existing singers become the participants of the ritual. The conception of the ritual is the same in different traditions: "Gods do this and people do this as well". Probably, this perception of the aforementioned traditions is still continued by the *sutartinės* performers who, as if insensibly, are gathering in a circle that for a human being of the cosmos epoch was a symbol of safety, comfort, guarantee, isolation of outside actions.

Abbreviations

LKŽ XI – *Lietuvių kalbos žodynas* [vyr. red. K. Ulvydas]. T. XI. Vilnius: Mokslas, 1978.
LLD Vk – *Lietuvių liaudies dainynas*. T. I: Vaikų dainos / Parengė P. Jokimaitienė. Melodijas parengė Z. Puteikienė. Vilnius: Vaga, 1980.
LLIM – *Lietuvių liaudies instrumentinė muzika* [Sudarė ir paruošė Stasys Paliulis]. Vilnius, 1959.
SlS – *Sutartinės: Daugiabalsės lietuvių liaudies dainos* [Sudarė ir paruošė Zenonas Slaviūnas]. Vilnius, T. 1–2, 1958; T. 3, 1959.

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Notes

[1] Yelizarenkova 1993: 6.
[2] „When Algirdas with his wife were going from Vitebsk to Vilnius all people that came to greet him were clapping their hands according to pagan customs and singing *Lado*! *Lado*! i..." (Stryjkowski 1582; II 13).
[3] LLD Vk 175.
[4] LLD Vk 187.
[5] According to N. Vėlius, M. Stryjkowski and other chroniclers of XVI–XVII centuries, Lado (Ladona) was god or goddess honoured by Lithuanians, Russians and other neighbouring nations and this conception cannot be treated as unreasonable (Vėlius 1998: 26).
[6] Yelizarenkova 1993: 7.
[7] Toporov 1987: 201.
[8] Neimontas 1998: 19.
[9] Rigveda X, 130, 1.
[10] Yet in comedy of ancient Rome it was known such contraposition as *diverbia – canticum* (Веселовский 1989; Račiūnaitė-Vyčinienė 2000: 208; 2002(a), 2002(b), 2004).
[11] Nketia 2000: 177–181, 224; Elscheková 1987: 71–72.
[12] Гамкрелидзе, Иванов 1984: 704.
[13] Веселовский 1989: 254.
[14] Кинжалов 1990: 84.
[15] By the way, *rinkti* also means "to check up by sorting, removing the unacceptable ones; to distinguish the suitable ones from many" (LKŽ XI: 652).
[16] X mandala, 71. [Hymn of Recognition] (*Estetikos istorija*... 1999: 157).
[17] Ермакова 1988: 76.
[18] Ibid.
[19] According to experience gained by Chinese philosophers, when music is "wrong", sounds are "untuned" (detuned, dissonant), norms of human behaviour and relations shall be infringed and the state concerned shall appear on the brink of ruin (Ткаченко 1990: 55–69; Музыкальная эстетика...: 20–21).
[20] Toporov 1995: 42.
[21] SlS 587.
[22] Janeliauskas 2001: 9.
[23] Ambrazevičius 2003: 127.
[24] Brandl 1989: 59.

Santrauka

Sutartinių „rinkimas": kanonas ir kūrybinis procesas

Senųjų kultūrų traktatuose apie muziką teigta, kad joje slypi protėvių žinios, užkoduotas jų „žinojimas". Iškilmingai ritualinei muzikai atlikti buvo skirti specialūs garsaeiliai. Manykime, kad ir pirmieji sutartinių giedotojai kadaise turėjo savą poetinių ir muzikinių formulių sistemą, tinkamą ritualiniam muzikavimui. Deja, apie tai neparašyta jokių traktatų. Stipraus maginio poveikio priežasčių bandysiu ieškoti pačių sutartinių struktūroje, jų atlikimo specifikoje, pasinaudodama savo pačios patyrimu. Pranešime aptariami šie reiškiniai:

- sutartinių ryšys su indoeuropiečių prokalbės laikus siekiančia žodžių skaidymo į dalis tradicija (skiemenų metatezė, žodžių inversija, palindromas). Analogiški dėsniai galėjo gyvuoti ir archajiškoje ritualinėje muzikoje, pvz., sutartinėse (panašių reiškinių būta ir profesinėje muzikoje – tai retrogradinė „vėžio" imitacija). Veidrodinio atspindžio principas – daugelio sutartinių muzikos darybos pagrindas;
- polifoninės muzikos sistema, pagrįsta 5 garsais (5 kanklių stygos, 5 instrumentai, sudarantys skudučių ir ragų komplektus); Biržų krašto sutartinių 5 tonų garsaeilis – dviejų gretimų „tonacijų" (dviejų binarinių polių), tarpusavyje derančių sekundos intervalu, sąveikos išraiška (vienos „tonacijos" tercija, tarsi įrėmindama kitos „tonacijos" centrinį garsą, paverčia jį viso garsaeilio centriniu tašku, susikirtimo ašimi). Plg. senovės kinų estetiką (5 garsai – visatos priešingų jėgų *yin* ir *yang* vienybė); krikščioniško kryžiaus kaip pasaulio visumos (vertikalė ir horizontalė, dangus ir žemė), kurią sudaro keturios šakos ir „kryžiaus centras", simbolį ir kt.;
- sutartinių muzikos „begalinis" skambėjimas lemia giedotojų sustojimą ratu. Tai būdas sukurti tam tikrą uždarą erdvę, kurioje esančios giedotojos tampa ritualo dalyvėmis. Ritualo suvokimas įvairiose tradicijose toks pat: „taip darė dievai, taip daro ir žmonės". Galbūt šitokio suvokimo tradicijas ir šiandien tebetęsia sutartinių giedotojos, tarsi neįučia sustodamos ratu, kuris kosmogoniškos pasaulėžiūros žmogui buvo saugumo, jaukumo, garantijos, atsiribojimo nuo išorinių veiksnių simbolis.
- melodijos ir teksto „rinkimas" – kūryba – kosmoso organizavimas šiandieniniuose sutartinių muzikos „ritualuose". Sutartinių grupių rinkėjų funkcija – reguliuoti muzikos tempą, ritmą, tembrą, judesius, t. y. atsakyti už visaapimantį, kosmosą organizuojantį muzikinį vyksmą.

P.S. Kanonas čia tai, kas tvirtai nustatyta (ne muzikinė forma).

Margarita Katunyan

The New Commentary as the Strategy of Self-identification by Means of Myth

1. New *Cantus* Thinking

The term "new canon" is quite often used in modern art analysis. It would be more accurate to speak about a new commentary and about new *cantus* thinking. Moreover, in a broad sense, we offer to define as *cantus* any used text or context (from *cantus prius factus*).

Up to the New Time any composition represented some sort of a commentary. After going to all the extremes in the realization of modern projects in individualistic opus composition within the second avant-garde wave, the postmodern art actually turned to cultural traditions and contexts, seeing the essence of an artistic utterance in interpreting the borrowed text. This has signified the emergence of new commentary thinking.

A comparison of the new commentary with the old canonic method, despite a number of similarities between them, makes it possible to reveal certain considerable differences owing to their varying cultural contexts.

In nature, the old method is spontaneous, primarily modal, being based on the principle of replication. The new *cantus* method is conceptual since a composer carries out a task undertaken by oneself.

In character, the old canon is inseparable from context viewed as a ritual situation predetermining its material and its structure. The modern method of commentary is oriented towards new syncretism, a new ritual, which may involve several different contexts.

The principle of bricolage. The latter term (from the French word *bricolage* meaning an artifact, improvised means) is understood by Lévi-Strauss as the treatment of available material. The old commentary method evolved in the pre-opus while the new one belongs to the so-called post-opus endeavours. A modern composer drawing on historical stylistic idioms departs from the author's language as individualized musical material or discards it altogether whereas in the pre-opus compositions, authorship as a language system had not as yet taken shape. In contrast to a medieval anonymous melodist using fixed songs and tunes, a modern commentator can employ all the available cultural information.

2. One's own – somebody else's

Self-identification is a concept associated with the opposition of oneself to some other person or thing and elucidating a strategy of one's own as related with somebody else's discourse. In modern actual art this correlation has entered into intricate interaction. The earlier type of a dialogue between the author and *cantus* still retains its links with the avant-garde projects declared from the position of authorship: "one's own" and "somebody else's". The zone of "one's own" comes to enclose "somebody else's" not so much as *cantus per se* but as a sign of some other context, as a symbol for its substitution. And it does not matter whether a dialogue is conducted in the form of parallel discourse (i.e. in counterpoint) or in vertical, discrete discourse, as an exchange of phrases; in any case this dialogue is conducted in different languages. Each party speaks in one's own language, with the author's language being delivered in the first person.

The chief point of a dialogue is in a distance between one's own and somebody else's discourse, and its essence lies in the primacy of one's own. The author conveys one's own as surrounded by another's utterances, encasing one's own in another's contexts and, in doing so, he comments on his own discourse through another's utterances. "One's own" seems to be feeding on "another's", to be flourishing and enriching by the latter, being embellished by its heraldry, claiming a kinship with it and inscribing oneself into its genealogy. In this way, the avant-garde has renounced its postulate of "moving forward without a step backward" for a citation was viewed only in this light when treated as material. But actually a breakthrough towards tradition as some other material meant that the avant-garde had moved still farther, stepping into the territory of *cantus* thinking.

A postmodern project offers a more radical method of interaction between "one's own" and "somebody else's" utterances. The method of bricolage allows one to give up one's own ambitions for self-expression and usage of the author's speech as material, inducing the composer to turn to giving a commentary. The novelty lies in positioning one's own discourse with regard to another's utterances. The symbiosis of attracted contexts in general does not reveal the obvious presence of the author's material. The question about a distance does not even arise in this case. One's own approach manifests itself not in the musical material but in a concept appealing in most cases to the extramusical sphere. And here actual importance is equally attached to all historical languages and dialects, traditions and contexts. The author builds up contexts, compares them, and their interaction produces a certain accent, making up an ensemble of mutual reflections and semantic resonances.

In their arrangements of *cantus prius factus* medieval masters used to embody the utopian ideas of their times. Nowadays, *cantus*, or commentary, thinking expresses its time by partaking of the whole range of cultural traditions. The selected *cantus prius factus* now embraces all the available historical and cultural hypertext.

THE PRINCIPLES OF *CANTUS* THINKING

1. *Cantus* involves borrowed material, direct citations, paraphrases, allusions, languages, and the method of texture and structure.

2. A source exists autonomously, outside of interpretation.

3. A source is well known (or it may be not so). It should be recognizable. This is the main condition of its communicative role.

4. *Cantus* is always based on the non-authored, non-individual principle.

Commenting on *cantus*, the composer expresses his own ideas through another's statements. In the case of bricolage, he speaks in the *cantus* language. Moreover, the composer comments on some "selected source" by using other "selected sources" and in this way he "immaterially" expresses his own ideas. He creates a context, or in other words, a situation.

I would like to present here in brief the following three works of actual art: Edward Artemyev's opera Raskolnikov after Crime and Punishment by Dostoyevsky; action "St Matthew Passion-2000", and the production of Mozart's Magic Flute by director Yekaterina Pospelova. For all the apparent dissimilarity between these three projects, they are interrelated by belonging to the common cultural space which we define as a new commentary and, in a broader sense, as new commentary thinking.

3. Mythologism. Collective Consciousness. Narrator

All the three original works undertaken for interpretation by modern artists belong to the sphere of cultural mythology viewed by us as symbolic and generally recognized invaluable phenomena. Their interpretation also reveals a distinct approach to these phenomena as cultural myths. The same is evident from an appeal to collective cultural consciousness, the pathos of overcoming individualism, and the presence of a narrator's figure. The treatment of these mythological plots combines the features of elitist and mass consciousness: a striking shrewdness of thinking and the fascination of delightful primitivism, naivety, and ethnic character.

The libretto for **Edward Artemyev's opera *Raskolnikov*** (1987/2002) was written by directors Andrei Konchalovsky and Mark Rosovsky, and the poet Yuri Ryashentsev. The music blends different genres such as rock, pop (Dixieland used to portray the character of Porphyry, the investigator) and non-academic singing (ethno- and rock-vocal) into an integral manifold utterance. The authors themselves appear to act as the prime collective narrators of myths. In their treatment of Dostoyevsky's novel (sinfulness, the pangs of conscience, repentance, and absolution) the accent is placed on the evangelic archetype: the plots about a loose woman and Lazarus's resurrection. Moreover, the authors bring onto stage a street organ-grinder, a narrator and commentator. Organ-grinders breaking in the "latest news" from the hay-market square retell their story in low, colloquial language:

Тут, в переулке, по соседству,
смертельный грех сокрыла мгла,
убили старую старуху,
котора проценты брала.
Убийца был, видать, прилежный,
Не как иные: тяп да ляп!
Он и убил, он и ограбил,
И никаких тебе улик!..

[Here, in a nearby side-street,
A mortal sin was committed under the darkness,
An old woman was killed,
The one who used to loan money on a short-interest.]

The debasement of heroes, on the one side, is to be understood as reduction, a downward tendency from the higher to the lower, from elitist to mass culture. Organ-grinders are semi-folk characters, the carriers of popular mythology, i.e. of that which is on everybody's lips, in the minds and mass consciousness. A commentary uttered by them becomes to sound anonymous and impersonal, that is, mythological. But on the other side, an organ-grinder is akin to the postmodern authors who by using colloquial speech express the highest ideas. And paradoxically enough, a high spirit preserves itself precisely thanks to the usage of a low language. The lowering removes the romantic fundamental principle, a heroic representation pose as external imitation. The lowering clears out pathos and falsity. The utterance becomes heartfelt, reduction proves to turn into simplicity, and the latter into holiness. In the scene where Sonia reads for Raskolnikov about Lazarus's resurrection: "... and when Jesus thus has spoken, he cried with a loud voice, Lazarus, come forth. And he that was dead came forth..." (John 11: 43–44), there appears on the stage an organ-grinder singing:

Гляди, Творец, в миру Твоем
чему пришлось случиться:
над Вечной Книгою вдвоем
Блудница и убийца.
Скажи хоть слово им, Господь!
А слово то известно:
И было так: из тлена плоть
воистину воскресла.

[Look, the Creator, what has happened
In Your world:
The whore and the killer
Are reading the Bible together.]

4. Remake

Remakes are characteristic of our time. A reproduced event, historical or artistic, gets imbued with the meaning of an invaluable archetype, which reveals the need to go back to it in order to experience it anew and interpret it in a new way. In other words, to return to one's origins. The remake of ***St Matthew Passion-2000*** appeared as a manifestation of *cantus* thinking. This grandiose opus lasting for five hours was written in memory of Johann Sebastian Bach and dedicated to his 250th jubilee. The new Passion was created by a team of like-minded persons belonging to a certain subculture of Moscow, St. Petersburg and Kiev. The contributing authors included 15 poets and 17 composers. The idea of a collective opus was developed by Yekaterina Pospelova, a philologist and stage director, Yekaterina Biryukova, a music critic, and Maria Stepanova, a poetess. All the contributions were compiled into an integral entity by **Pyotr Pospelov**, a music reviewer and composer.

The new Passion rests upon the plan of Bach's original opus (its dramaturgy, the number and order of items). It comprises the Evangelist's recitatives, presenting the course of events as recounted by the well-known characters (Jesus, St Peter, Judas, Pilate), arias expressing the individual

experiences, and chorales as exponents of collective religious feelings. The large-scale choral compositions frame up the entity. The function of a commentary is entrusted to cultural and stylistic strata: high classical and underground music, refined conceptual poetry and street primitivism, ethnic culture, folklore, Russian spiritual verses and church choral singing, electronic music, academic avant-garde, minimalism, "new simplicity," rock aesthetics, video clips, ballet, 20th century newsreels, and multimedia.

Dmitry A. Prigov, poet-conceptualist: "A remake allows modern composers to join into Bach's fundamental structure and, without parodying and travestying, try to understand what is Bach as transposed into our time. Our time is not so religious and authentic to the form of passions. But if you are sincerely concerned you feel that the old structure bears both semantic and intonation memory".

Gennady Aigi, poet: "The serious and genuine heat of passions represents the kinship with that which is larger than myself".

Despite a diversity of styles, the old structure has united all the utterances into a certain super composition.

IN POETRY: lyrical reflections, ritual suggestive actions. The chorales display childish naivety and simplicity:

> Пойдем на площадь пялиться, заламывая бровь.
> Там Божий храм развалится и выстроится вновь.
> Где Божий храм, там пыль столбом, там груда кирпичей,
> Как будто Бог забыл свой дом, как будто дом ничей.
>
> [Let's go to the square and stare at how
> God's temple is to collapse and be recreated again.]

Ritual suggestive actions by Lew Rubinstein ("And I'll come to him" [Joseph of Arimathea and Pontius Pilate]):

> И я приду к нему. И я скажу: "Отдай мне его. Тебе он зачем?
> Отдай мне его. Тебе ведь не надо. Отдай мне его. Мне надо. Отдай".
> И он мне скажет: "Возьми, конечно! Мне зачем? Возьми, ладно. Тебе надо. Возьми".
> И я возьму его, и я сделаю, что надо.
>
> И я прихожу к нему. И я говорю ему: "Отдай мне его. Тебе он зачем?
> Отдай мне его. Тебе ведь не надо. Отдай мне его. Мне надо. Отдай".
> И он мне говорит: "Возьми, конечно! Мне зачем? Возьми, ладно. Тебе надо. Возьми".
> И я беру его, и я делаю, что надо.
>
> И я пришел к нему. И сказал: "Отдай мне его. Тебе он зачем?
> Отдай мне его. Тебе ведь не надо. Отдай мне его. Мне надо. Отдай".
> И он мне сказал: "Возьми, конечно! Мне зачем? Возьми, ладно. Тебе надо. Возьми".
> И я взял его, и я сделал, что надо.
>
> [And I'll come to him. And I'll say: "Give him to me. Do you need him?
> Give him to me. For you have no need for him. Give him to me. I need him. Give to me".
> And he will say: "All right, take him! I don't need him. Well, take him. You need him. Take him".
> And I'll take him, and I'll do what should be done.
>
> And I come to him. And I say: "Give him to me. Do you need him?
> Give him to me. For you have no need for him. Give him to me. I need him. Give to me".
> And he says: "All right, take him! I don't need him. Well, take him. You need him. Take him".
> And I take him, and I do what should be done.
>
> And I've come to him. And I've said: "Give him to me. Do you need him?
> Give him to me. For you have no need for him. Give him to me. I need him. Give to me".
> And he has said: "All right, take him! I don't need him. Well, take him. You need him. Take him".
> And I've taken him, and I've done what should be done.]

In its MUSIC the citations from Bach are rare and indirect. As a whole, the work on *cantus* includes:

• Bach's text presented in new electronic arrangement (the viola's aria);

• motto-bricolage: the first bars of Bach's initial chorus and the author's text follow without borderline marks (Iraida Yusupova, No 1);

• instrumentation according to Webern's method (Bach-Webern Passacaglia–Gavotte by Gaivoronsky);

• authentic stylization by Sergei Zagny: the arrangement of Protestant melodies in the Bach style, instrumental fantasias and choral preludes; and

• Baroque idioms. The *new sincerity* of Bach's idiom by Pyotr Pospelov in St Peter's Aria in the form of *da capo*.

Yet, in general, the predominance is given to free composition geared conceptually in one way or another to the idea of passion.

But in the chorales delivered according to the Protestant tradition the use is made of song melodies well familiar to everybody, such as "A fir-tree was born in the forest", "Suliko", "A Godfather", "Evening Bells" and other popular hits. In the Lutheran traditional spirit, the audience joined in the singing of these chorales with the text underlay of the new first-rate verses displayed on the screen. The shared communion in reverence of Bach approximated the whole happening in St Andrew Anglican place of worship to a kind of spiritual cultural action. This experimental gesture of radical cherishing a tradition would have been impossible at a philharmonic concert.

5. Intertext. Medley. Poly-cantus

Both the medieval and the new type of a commentary are intertextural. But in the old method use is made of parallel pieces, i.e. different canonic texts expounding one and the same thought, though developing it in different ways. The new intertexture encloses different texts not necessarily or altogether unrelated with the general idea. The principle of correlation is "composed" by the author who can be quite selective, which means that the emerging macrotext, a situation, actually represents the author's discourse.

The ensemble of mutual reflections and semantic resonances is most extensive in *The Magic Flute* produced at the Small World Theatre by **Yekaterina Pospelova**, project designer and stage director.

The Small World Theatre staged Mozart's *Magic Flute* in a folk "vertep" (puppet show) style under the title of ***The Miraculous Pipe***.

The young authors of this project, director Yekaterina Pospelova and poets Maria Stepanova, Psoi Korolenko and Igor Ebanoidze, precede the performance by informing the audience (in the theatre program) that Mozart's autograph was allegedly discovered in one of the Russian archives and that Mozart had after all accepted the invitation of Prince Golitsyn and had not only visited Russia but also had provided for it the Russian version of his magic opera calling it "The Miraculous Pipe." This touching mystification justifies the Russian geographical and cultural landscape against which the action of this *Singspiel* unfolds. Here are the remarks to Scene 1:

> Winter, snowstorm, snow-drifts. Tamino, a German student of philosophy, has lost his way in the snow. Tamino in snow (singing in German):
>
> *Zu Hilfe! Zu Hilfe! Sonst bin ich verloren.*

Mozart's vocal music sung by Roman Paier, the young Austrian tenor, carries the conceptual meaning. The Russian-German-Austrian alliance can be traced throughout the opera in the arrangement of mutually rhymed verses and the intercrossing of cultural blocks and sounds: the crunching of frosty snow under Papageno's felt boots and the tender "Die Puppe ist bezaubernd schön" at the appearance of Pamina, a small doll, from the puppet box. The texts are given in free translation, or to be more precise, recounted by the characters, including Tamino, the student, and Papageno, a vagrant showman, with his puppets: Pamina, the novice, Sarastro, the wise old man, the Queen of Night impersonating Death with a scythe, the rubicund Monostatka and his girlfriends, funny devils from the oven (reminiscent of Gogol's); three ladies presented as village girls; and three boys, winged angels on the skis. Papageno shows his puppets, tells a fairy tale and then finds himself in it. Schikaneder's plot was preserved, though some additional "motifs" (in the unofficial religious and philosophical spirit) were put into new contexts: Tamino is brave and pure at heart and, like Parsifal, is selected to be a heir to the dying Sarastro; the puppet showman is

associated with Schubert's vagrant miller and organ-grinder. In addition to plot allusions, the poem contains numerous citations from Russian literature, from Pushkin, Lermontov, Griboyedov, Tyutchev, Chekhov, Korolenko, and Mayakovsky.

A trial by silence is accompanied by Tyutchev's verses "Keep silent, conceal yourself and hide your feelings and dreams" and Pushkin's "Through life, tears and love".

This is a real mixture of genres, including a puppet show, a Bohemian-like intellectual festive gathering, home theatre, a cheap popular pattern, a Christmas tree, fairy and mystery tales, all of which taken together represent a real postmodernist paradise. The translators juggle casually with citations, mystification, and intertexture references to Gogol and Pushkin, Schubert and Wagner's Parsifal, Chekhov and Goethe. But as a whole, this easiness and witticism was not intended to just entertain the public. Quite the contrary, the authors speak about very serious things: about love, despair, holiness and devotion, about children and wise men, accentuating that (Sarastro singing):

> Мы все – без имени, без рода,
> стоим у гробового входа,
> где виден тот и этот свет,
> где видно то, что смерти нет!
>
> [All of us, nameless and without kith or kin,
> have one foot in the grave,
> where you see this and the other world,
> where you see that there is no death!]

Such matters told in a simple style turn out to be really genuine. But the most important point is in preserving Mozart's spirituality, its lucid, motley and fairy-like coloring. The performance proved to be a revelation to the elitist intellectually creative public and children alike.

Thus, Bach's Passion, an opera by Mozart and a novel by Dostoyevsky have been retold as great cultural myths to mirror our contemporary cultural panorama.

Translated by Romela Kokhanovskaya

Santrauka

Naujas komentaras kaip saviidentifikacijos per mitą strategija

Pranešime nagrinėjamas šiuolaikinės rusų muzikos posūkis tradicinių pasijos ir operos žanrų link. Autorė apibendrina šiuolaikinės kultūrinės savimonės bruožus pagal *naujosios bažnytinio giedojimo sampratos* koncepciją, pagal kurią nagrinėja dabartinę kultūros situaciją – naują požiūrį į tradicijas, tradicijos sąveikos su naujuoju požiūriu į ją mechanizmą, veikiantį pagal principą „savas – svetimas". Autorė išveda analogiją tarp senosios *kanono* sąvokos ir *naujosios bažnytinio giedojimo sampratos*, rasdama ir bendrų, ir skirtingų bruožų, apibūdinančių šiuolaikinę kultūrinę paradigmą: mitologiškumas, konceptualumas, naujasis sinkretizmas ir intertekstualumas, *policantus* charakteristikos, mozaikiškumas, kolektyvinė galvosena, etninės ypatybės ir archetipiniai bruožai.

Šią kultūros situaciją iliustruoja trys muzikinės kompozicijos, kurių autoriai naudojosi reikšmingais europinės ir pasaulinės kultūros klasikiniais modeliais, lėmusiais daugelio žmonijos kartų vertybių skalę. *Cantus* žanrai ir jų „komentariniai" variantai kilo iš: 1) J. S. Bacho „Pasijos pagal Matą" ir P. Pospelovo projekto „Mato pasija-2000", įgyvendinto grupės poetų ir kompozitorių; 2) F. Dostojevskio romano „Nusikaltimas ir bausmė" ir E. Artemjevo operos „Raskolnikovas" pagal J. Riašencevo libretą; 3) W. A. Mozarto „Užburtosios fleitos" ir J. Pospelovos projekto „Stebuklingoji dūdelė", kuriame panaudota Mozarto muzika ir naujas P. Korolenkos bei M. Stepanovos libretas.

Pasakotojo vaidmenį atlieka personažai – nusimetę herojų kaukes, nuspalvinti folkloro spalvomis, atstovaujantys kaimo ir žemesniojo miestiečių sluoksnio kultūrai: gatvės rylininkas (operoje „Raskolnikovas"), kaimo pamokslininkas („Mato pasijoje-2000") ir valkata Papagenas („Stebuklingojoje dūdelėje"). Komentuojami šie kultūriniai ir stilistiniai klausimai: muzikinė *undergroundo* kultūra, rafinuota konceptuali poezija, folkloras ir rusų religinė poezija, avangardizmas, minimalizmas, elektroninė muzika, roko ir popmuzikos estetika, „naujasis paprastumas", videomenas, baletas, dokumentinė kronika ir multimedija. Trys meno šedevrai atpasakojami didžiojo kultūrinio mito, kuris tarsi veidrodis atspindi mūsų šiuolaikinę kultūrinę panoramą, forma.

Audronė Žiūraitytė

Transformation of Resources in Creative Process: Homage to Fryderyk in Onutė Narbutaitė's *Autumn Ritornello*

In 1999, Onutė Narbutaitė was commissioned by the Vilnius Festival to write a chamber piece for violin, viola, cello, and piano, which was eventually given a double title – *Autumn Ritornello. Hommage à Fryderyk*. On June 20 of the same year, the work had its world premiere at the National Philharmonic Hall in Vilnius performed by Vadim Repin, Yuri Bashmet, David Geringas, and Mūza Rubackytė.

This paper examines what kind of homage to Chopin Narbutaitė creates in her *Autumn Ritornello. Hommage à Fryderyk*, and how this is made by using borrowed material from a number of Chopin's works. The composer herself lends a helping hand by providing exhaustive notes for the piece: "This work, referring to Chopin's year, also extends the calendar of my musical touches: Chopin's autumn finds place between Mozart's summer (*Mozartsommer 1991*) and Schubert's winter (*Winterserenade*). These touches are not as light as they might appear from a detached view. The interesting and tempting play is always followed by a painful reflection and inevitably leads to Heraclitus' riverside. As one watches its ever-changing stream, imitation seems fruitless, juxtaposition senseless, while the distant autumn – Chopin died in October of 1849 – does not seem to request for any markedly ironic dissociation. I try to model my own musical gestures, which are nevertheless based on Chopin's details in melody, rhythm, harmony, texture, and determined by his spiritual suasion. In the ritornello motifs that recur in each time modified form listeners will hardly hear any precise quotations, yet they should feel Fryderyk's shadow passing by. A good reason for this shadow to extend over this particular work written for the Vilnius Festival is related to a broad gamut of romantic half-tones that appears to be quite fitting the musicians that are going to perform it."

According to the Chopin scholar Mieczysław Tomaszewski, the use of positive, expressive semantics and Chopin's music-related idioms as if 'resurrect' Chopin; and the authors of works honouring Chopin are well aware of that.[1] They include the following idioms pianistic, folkloric, lyrically nocturnal, nostalgic, narrative-balladic, and dramatically heroic.[2] Due to multifarious nature of Narbutaitė's piece, it would be difficult to concentrate on any single idiom. They interact getting closer to one or another, creating the homage to Chopin and at the same time keeping distance with the extraneous material.

Autumn ritornello... is based on variant repetition of the three episodes. Presented below is the letter diagram of this work (the second row shows pages of the score[3]):

A (pf, *rubato*)	B (strings, *Vivo*)	C (*tutti*, *Largo*)...	A_1 ...	~B_1 ...	C_1 ...	A_2 ...	C_2...	~B_2 ...	C_3
1	5	8	11	15	16	20	22	29	36

Episode A is written for piano solo (indicated as *pf*). The piano timbre and Chopin's vocabulary (the aggregate of 'words' characteristic of him) most distinctively opening in this section signify the pianistic idiom of composer's music that is first of all related to timbre and also the texture. Episode A is undoubtedly perceived as a *Hommage à Fryderyk*, and it also appears to be the surface of a *hommage*, while the more profound side is going to reveal itself later. Now we can easily recognize the composer who inspired Narbutaitė. While turning over the pages of the score we realize that the initial piano scale (Example 1a, score p. 1) came from Chopin's Waltz in C sharp minor, Op. 64 No. 2 (Example 1b).

In episodes A and A_1 we hear quick runs and the 'dropping' (Example 2a: p. 12) from the Prelude in D flat major, Op. 28 No. 15 (Example 2b).

Other motifs (Example 3b) from the Waltz in D flat major Op. 64 No. 1, dedicated to Delfina Potocka, resembling Igor Stravinsky's variation of *ostinato* motifs and phases, are also woven into the turbulent movement of episodes A and A_2 (Example 3a: p. 2; also 7a: p. 21), resembling the texture of Narbutaitė's *Climber* for two pianos.

In episodes A and A_1 used as a leitmotif, the melodic turn used also in episode B (Example 4a: p. 29) is coming from the Nocturne in C minor, Op. 48 No. 1 (Example 4b), as well as other salient thematic unit (Example 5b) (*Lento rubato,* Example 5a: p. 14). The rhythmic values of the latter are extended (augmented) and the harmonic vertical is given an added melodic figuration. Although Narbutaitė renders the above-mentioned Chopin's texture in diminished rhythmic values, the latter is augmented. This way its expressive semantics – nocturnal idiom – is accentuated. Narbutaitė makes the romantic reverie even more distinct in the following sections.

The end of episodes A and A_2 (Example 6a: p. 5, also pp. 7, 22) is reminiscent of the first Ballade in G minor, Op. 23 (Example 6b), the passage of which would naturally weave in the texture of Narbutaitė's *Climber*. An impetuous unit becomes the leitmotif for episodes A and A_2 (Example 7a: p. 21; see also Example 3a and Example 4a). Its model can be found in the Etude in E major, Op. 10 No. 3 (Example 7b), which appears to be opposed to the first dreamy leitmotif (Example 4a). This second leitmotif – or, more specifically, its metrorhythmic variant with rhythmic augmentation and displacement of metric accents – serve as a basis for the piano part in the energetic episode B_2.

While varying the same material, the piano episodes in section A get shorter until they vanish completely. Fragments repeated in section A_1 do not recur in section A_2, with the exception of several archetypically Chopinian melodic turns and the leitmotifs discussed above (Examples 4a and 7a).

To sum up the musical fragments from Chopin used by Narbutaitė in sections A, A_1, and A_2 we see that they represent different *phases of creative path*[4] of the composer described by Tomaszewski as post-romanticism *in spe* (Waltz in C sharp minor, Op. 64 No. 2, and Waltz in D flat major, Op. 64 No. 1, dedicated to Delfina Potocka); dynamic romanticism (Prelude in D flat major, Op. 28 No. 15); and pre-romanticism (the first Ballade in G minor, Op. 23, and Etude in E major, Op. 10 No. 3).

Irrespective of the selected source – be it a waltz, a prelude, a ballade, or an etude, – these fragments of Chopin's music are transformed into a passage movement of very short rhythmic values; they sound brilliant as etudes and definitely reflect Chopin's expressive pianistic semantic idiom (Examples 1a, 2a, 3a, 6a, 7a); the texture of the Etude E major, Op. 10 No. 3 is more freely developed with the introduction of an instrumental ensemble (Examples 8a and 8b). As a fragment plaited into the work of other composer (of Narbutaitė, in this particular case), the pianistic idiom resonates in a number of different ways. Most often there is a balancing on the verge of reminiscence and allusion as well as allusion and quotation.

According to Tomaszewski, a reminiscence, which is subconscious and often perceived as such in the work of Narbutaitė, still reconstructs very precisely Chopin's melodic and, sometimes, harmonic writing. This brings it closer to the allusion. However, the short duration of the fragment which displays the choice of embellishing, passing notes, and introductory, evolutionary, rather than expositional (beginning of the theme) type of material returns a shade of the 'subconscious' to such music. Moreover, a profound sensitivity to and interiorization of Chopin's music is closer to the reminiscence.

The "phase of reflecting romanticism" in Chopin's works acquires exceptional significance already in section A, because the text contains several fragments of the Nocturne in C minor, Op. 48 No. 1 (Examples 4a, 5a). Reflection becomes more distinct as the work develops.

The invariant of Chopin's style, based on his early nocturnes, can be also traced in Schumann's *Carnaval*, while his lyric nocturnal idiom is evident in Franz Liszt's *Liebesträume.* In Narbutaitė's work, this idiom is applied in a refined manner, keeping the distance between the borrowed and the original text. Chopin's passage seems to be spaced out using the principles of nocturnal texture – the melody (*legato cantabile*) is accompanied by sparse supporting notes (cf. Examples 5a and 5b). It seems nearly a quotation, but it is still an allusion. Thus a fragment of particular work is reformed and developed. And it is difficult to say which of the methods proposed by Tomaszewski is deployed – transcription, arrangement, vocalization, variation, paraphrase, fantasia, or metamorphosis.[5] In transcription, arrangement, or paraphrase, the authorship is somewhat depreciated. This, incidentally, was aptly noted by one German critic who, failing to find exact genre definition of Narbutaitė's *Winterserenade*, called it a paraphrase and admitted to have thus "abased"[6] the work.

By the way, Chopin's lyric nocturnal image is not entirely new in Lithuanian music. For example, Juozas Gruodis, in his ballet *Jūratė and Kastytis*, orchestrated his piano piece *À la Chopin* (1920–1921) for the *Adagio* section of the *Pas de deux.* According to Gruodis' biographer and researcher Algirdas Ambrazas, he did occasionally use elements characteristic of romantic music and sometimes even employ pure stylisation.[7]

Turning back to Narbutaitė's work, it can be noticed that when the chamber ensemble comes to the foreground, it is not the pianistic or lyrically nocturnal idioms of Chopin's music that prevail, but rather the nostalgic idiom, close to the earlier one, especially considering its occasional grounding on echoes of nocturnes (Examples 9a, 9b, 9c). The ensemble episodes (i.e. those without the piano solo) also abound with reminiscences, allusions and quotations, which, not sounding in the piano part and being more expanded, are more difficult to identify as Chopinian. The fragments of works created in different creative periods emerge here in different shape – from ordinary motif to the metamorphosis, as in examples provided below.

In *Piu mosso* section of the episode B_2 (Example 8a: p. 32) a different motif replaces that of the Etude in E major, Op. 10 No. 3 (pre-romantic phase; Example 8b). While the piano part of the *Largo* episode (Example 9a: p. 45) displays augmented figurations from the Nocturne in D flat major, Op. 27 No. 2 (phase of virtuoso brilliance; Example 9b) and quick runs from the Nocturne in F sharp major, Op. 15 No. 2 (Example 9c). The piece ends (Example 10a: p. 47) with intonations from the Prelude in F minor, Op. 28 No. 18 (phase of dynamic romanticism; Example 10b). In the violin part (Example 11a: p. 44, also pp. 9, 18), a motif from the Nocturne in D flat major, Op. 27 No. 2, is heard (phase of virtuoso brilliance; Example 11b).

In string trio episode (Example 12a: p. 46) the main motif of the same Nocturne and its harmony based on figurations (Example 12b) are rhythmically augmented and spaced apart; they appear to freeze in suspense full of Chopin's presence. This shows perhaps the most perfect synthesis of a model and an individual style, when the original 'source' becomes unrecognisable.

The cello solo part (Example 13a: pp. 18, 19) consists of motifs from several Chopin's works: Waltz in A flat major, Op. 64 No. 3 (Example 13b), and the fourth Ballade in F minor, Op. 52 (Example 13c; both examples illustrate the phase of reflecting romanticism).

The pianistic idiom resumes and reaches its climax at the end of the work, with the passage from the Etude in C minor, Op. 10 No. 12 (the pre-romantic phase; Example 15).

The intertextual vocabulary that penetrates the text plays an important role in shaping the semantic processes, and those of intertextual and interstylistic communication.[8] The implications of Chopin's text provoke discovery and verbalisation of not only the syntactical nature, but also the semantic level of Narbutaitė's music. In the opening sections of the work, Narbutaitė presents Chopin as a shining romantic and dreamer. We are listening to the music of sophisticated style. According to the composer, Chopin's music fascinates her "with a combination of refined elegance, beauty and deep, simply and moderately expressed sadness. They do not contradict each other."[9]

As a performer Chopin did not like and was afraid of the concert stage. The sparkling, resplendent beauty of his music (that is also characteristic of the beginning of Narbutaitė's work) was nurtured by the aristocratic environment. Probably this is why we sometimes encounter a narrow, 'salon' interpretation of Chopin's music. Probably because of that the classic of the 20th century music, Polish composer Witold Lutosławski, maintained: "a few people acknowledge all that is contained in him [that is, in Chopin – *A. Ž.*]."[10] Superficial feelings, outer virtuosity, posing and indulgence in gracefulness of external form (to name just a few features describing the 'salon' quality of his music) are after all inconsistent with Chopin's true nature. The graceful and trimmed form of Chopin's works is always full of calm and feeling, and this not only agitates, but sometimes even shocks the listener. Such shock might be experienced by listening to Narbutaitė's *Largo* from *Autumn Ritornello...* (see section C in the diagram).

Four sections of *Largo* reveal the essence of both Chopin's creation and Narbutaitė's work. Before *Largo* there is a contrasting episode B (*Vivo*) where the texture is written in triplets characteristic of etudes, in 6/8 time, which is very characteristic of Chopin. Such musical fabric also reminds an archetypically romantic Schubertian texture of *Winterserenade* by O. Narbutaitė. In the *Autumn Ritornello...*, however, such texture is scored for strings and tinged with dissonant harmonies, which makes it sound more contemporary and is much harder to identify as Chopinian.

The short Chopinian cadence from the Ballade in G minor, Op. 23, stops this process (pp. 7, 8) and marks the beginning of the new section – the first *Largo* begins (B, *Vivo*; there is also a similar cadence on p. 5; Example 6a).

Characteristically to the instrumental ritornello, the extent of four *Largo* episodes (C, C_1, C_2, and C_3) increases and expands, as opposed to the diminishing sections A. All *Largo* episodes create the image of emerging and eventually coming death, and reveal the painful and tragic encounter of romantic Chopin with reality.

Such treatment is also encouraged by Narbutaitė herself who said that *Largo* episodes were inspired by the legend related to Chopin's last days when Delfina Potocka miraculously sang to the dying composer. His death and dying vision form the emotional basis of *Largo*, while Chopin's Prelude in A minor, Op. 28 No. 2, constitutes the source of musical material for *Largo* sections. The prelude was created in the "phase of dynamic romanticism" – in the years of Chopin's creative maturity. According to Tomaszewski, this is the style of pianistic prowess and extremely condensed emotional energy[11] – a description, which is commonly applied to Chopin's style as such.

The influence of Prelude in A minor, Op. 28 No. 2, can be felt the in the musical language of Narbutaitė: it makes no claim for virtuoso display and stands out for its extraordinary mysteriousness, lingering Tristan chords and dissonant harmonies, and a surprisingly modern sound, presaging the music of the future. This is one of a few examples of Chopin's music that would illustrate and corroborate the statements of Claude Debussy and Witold Lutosławski, maintaining that the music of Chopin contained the seeds of Wagner's great harmonic discovery. It can be viewed as an avant-garde piece of the time, introducing bold harmonic innovation, such as the quartal intonation that became widespread in late romanticism. The rhythm of sustained dotted notes brings about the associations with the funeral march from Sonata in B flat minor. It becomes the leitrhythm (pp. 8, 16, 27) in Narbutaitė's work as well (Example 14: p. 27). This rhythmic pattern performs a special and independent function at the end of the third *Largo* episode (C_2) where it seems to be related to the semantics of the mass Elevation[12]. It might seem that all has been said, but the power of composer's imagination is inexhaustible.

Detached from section A (piano episodes) and incorporating elements of the episode B, the *Largo* episodes (C) are given special emphasis, because Narbutaitė considers this mournful *Hommage à Fryderyk* more important than the one with which the work begins.

In his book, Tomaszewski relates the nostalgic idiom of Chopin's music to the Polish word *żal*, which is translated into French as *tristesse*, into German as *Wehmut*, and which is not identical to the English *spleen* or Russian *khandra.* It is not melancholy, and is entirely different from elegy. The word *żal* is translated into Lithuanian as pain, sorrow, complaint, or mourning. However, this word encompasses more: it is related to the expression of existential reflection and deep pensiveness[13]. The meaning of Polish word *żal*, describing the nostalgic idiom, also unveils the national uniqueness of Narbutaitė's music.

The essence of Chopinian 'phraseology' in *Largo* sections are completely integrated in the text of Narbutaitė[14], which makes a resourceful use of strings not characteristic of Chopin. It is astonishing to notice how the prevailing role of strings unites the *Largo* episodes that best reveal Chopin's image. The gradually descending viola part is prominent in the first *Largo* episode (C). The second *Largo* (C_1) features sustained and downward running notes on cello, soon forming a livelier episode performed with piano accompaniment. In the third *Largo* (C_2), the violin enters in uppermost register (p. 25) and, contrary to the cello part, this section is more active at the beginning, then runs downwards and slows down. This way the light Chopinian flight is conveyed. Chiaroscuro play enlivens the *Lento leggierissimo* episode (p. 27).

Prominent in the *Largo* episodes is also the penetrating *glissando*, first performed by solo violin (p. 23) and later (p. 39) expanding to all strings, which drives tension to the extreme. This is achieved by engaging various string registers of different intensity and asynchronously sliding romantic harmonies. Charging piano runs and jarring Chopinian chords are heard in the background of non-subsiding tension (p. 42) until the linear flow gives way to the complementary (that is, a combination of horizontal and vertical layout) texture in the final dreamy *Largo sognando* (p. 44). The recurring violin's *glissando* creates an impression of final extinction, which is enhanced by piano farewell, or rather greeting from the other world (similar to the final scene in Igor Stravinsky's *Petrouchka* where the hero 'sends regards' while rising to heaven – his leitmotif is

heard for the last time in the orchestra). It comes in the form of quotation from the Etude in C minor, Op. 10 No. 12, and flies away 'to nowhere' (Example 15: p. 48).

The *Largo* episodes involve much improvisation, as if bridled by regular mournful rhythm and constant spawning of romantic melodies. Not only we hear allusions to Chopin's melodic patterns, but also recognize the contours of his piano texture, coloured with contemporary intonations.

While listening to *Mozartsommer*, *Winterserenade*, and *Autumn Ritornello. Hommage à Fryderyk* by Narbutaitė, we sense the load of cultural and historical associations; they nearly become programmatic (that is, verbal), appealing to the educated listener. The discursive (that is, substantiated by reasoning) cognition of the 20th century is often considered to be the attribute of thinking. In such cases the context plays a determining role, both from a broad and narrow perspective. Historical and cultural background and the ability of the listener to actively perceive the associations are equally important. All the more that such associations rise from the art of the past rather than from the life itself. In addition, it can be said that the text created by Narbutaitė attracts elements from the "intertextual universe" that once belonged to the texts of other authors, and the context absorbs such elements into its own universe. Here the context is perceived not as an ordinary environment or a fragment of text, but rather as a system of relations which determines the "behaviour" of individual elements in the text.[15]

All of the above-mentioned works of Narbutaitė are obviously contextual. Speaking about the *Autumn Ritornello...*, the signs of Narbutaitė "style" or those of Chopin's, taken individually, make no sense — it is their interaction that is important. According to the philosopher Michael Oakeshott, new discoveries may not be applied to the old world (and we might add, *vice versa — A. Ž.*). They exist only when the world is changed as a whole; and the nature of new discoveries is not fixed, they are determined by their position in the world as a whole.[16]

The works of Narbutaitė containing elements or fragments from other texts sound just as authentic as those where no borrowings are employed. All works by Narbutaitė are linked with her highly individual approach to the 'events' of the text, as well as the ability to arrange them in original and authentic sequences. Relying on numerous sources of Chopin's music, Narbutaitė retains the necessary balance, without which a movement to one side would destroy Chopin, and a movement to another side would destroy Narbutaitė herself. The history of music has many examples of idiostyles formed from style synthesis. It is difficult to remain authentic under such circumstances, yet the composer succeeds in doing so both due to the ability to shape an organic whole of the work (as the universe created by her) and due to harmony between own and extraneous material.

Understanding of the processes inherent in the music of both Chopin and Narbutaitė is facilitated by the recent semiotic theory and ideas about the corporeality of music, its gender-relatedness (genderness), and other related transcendental, essential and authentic aspects. Eero Tarasti raises an issue: are corporeal signs represented in music iconic, or is the actual body of Chopin 'speaking' to us when he uses the military rhythms and signals, galloping horses, and other conventionally masculine signs? These signs undoubtedly evidence that "the body in his music is often a socialized 'body' of norms and stylistic constraints". As the composer often tries to transgress such constraints, we move to the sphere of the transcendental .[17] It is this sphere that Narbutaitė tries to grope in her work (namely, in *Largo* sections) honouring the author, while we try to capture the essence of Narbutaitė's work.

Tarasti admits that "whatever we mean by 'body' in music, in Chopin it always appears via the piano and its idioms"; it is represented, for instance, when he wrote piano passages which best suited his abilities as a pianist[18]. The above analysis of Narbutaitė's work (episodes of the section A) shows her original use of these idioms by adding the etude-like virtuosity to Chopin's works of different genres, which serves to enhance the pianistic idiom and without which her dedication to Chopin would seem altogether impossible. However, Narbutaitė is consciously or unconsciously aware, to paraphrase Tarasti, of that even indexical signs of Chopin's body as a performer or socially "constrained" body, do not necessarily reflect his individual body. Therefore, the strings revealing the individuality of Chopin play an essential rather than minor role in Narbutaitė's *Hommage à Fryderyk*. For episodes of the section A and all work in general, except for waltzes, Narbutaitė selects socially less defined genres – not polonaises or mazurkas, but preludes, etudes, nocturnes, and ballades – by granting special significance to Chopin's "phase of reflecting romanticism".

So what is that individual body of Chopin represented in the texts of his works – masculine or feminine?[19] According to the researchers, Chopinian body is in a constant struggle against the conventions. True authentic meaning emerges only when the body breaks with social conventions. They are overcome by the breakthrough of the *khoratic body*, to use the terminology of Julia Kristeva. For Kristeva, the *khoratic realm*, not the symbolic or patriarchal order, is the essential one.[20] According to Tarasti, "in music, this would signify moments when the topical logic of the surface levels collapses, as well as the syntax of other musical parameters, and normal tonal logic gives way to something else."[21] Narbutaitė transfers these novelties to the centre of her work by selecting the works (e.g. Prelude in A minor, Op. 28 No. 2, for the *Largo* episodes) and by penetrating into the authentic *khoratic* space of Chopin's music. The outer, civilized 'body' of Chopin seems to remain in the margins of *Hommage à Fryderyk*, but it provides a chance to recognize it through external signs (piano idioms). The presence of the authentic *khoratic body* in Chopin's music allows for its expansion through natural expression of Narbutaitė's modernism. Sections B and C contain much improvisation: fragments of Chopin's pieces written in different creative periods emerge here in different shapes – from simple motif to metamorphosis, and the nostalgic idiom of Chopin's music, related to the Polish word *żal*, prevails over the pianistic idiom.

In music, both Chopin and Narbutaitė are struggling to establish the individual *khoratic body* and to transfer the social dependency (while Narbutaitė moves the dependency from Chopin) onto certain generalized, transcendental level. We may eventually bring together this play among the various types of "Chopinian bodies" and their metaphors existing in his music into a genuinely romantic journey, from the material world to the spiritual sphere. This is very distinctively revealed in the work of Narbutaitė. The increasing duration of four *Largo* episodes (contrary to the truncating pianistic, or 'socialized' sections A) creates, as already mentioned before, an image of approaching and finally arriving death, and reveals the tragic encounter of Chopin as a romantic with 'social' reality as well as the transcendental existentiality in his music.

Notes

[1] Mieczysław Tomaszewski, *Muzyka Chopina na nowo odczytan,* Kraków: Akademia muzyczna, 1996, pp. 146–154.

[2] Ibid., p. 151. The idioms of 'salon music' and 'sickliness' are considered negative and artificial.

[3] Pages are indicated according to the score manuscript.

[4] See Mieczysław Tomaszewski, *Muzyka Chopina na nowo odczytana*, op. cit., pp. 18, 32, 33.

[5] Ibid., pp. 121–35.

[6] "Onutė Narbutaitė's *Winterserenade* is a masterpiece controverting Schubert's *Winterreise*, and somewhat abasingly (*etwas tiefstapeld)* might be referred to as a 'paraphrase'". See David Wohnlich, "Begegnung mit Litauen", *Basler Zeitung*, No. 21, January 26, 2000.

[7] Algirdas Ambrazas, *The Life and Work of Juozas Gruodis*, Vilnius: Vaga, 1981, p. 241. Mieczysław Tomaszewski, referring to Schumann's *Carnaval*, Tchaikovsky's Mazurka in C sharp minor *Un poco di Chopin*, Op. 72 No. 15, Grieg's Etude in F minor, Op. 73 No. 5, *Hommage à Chopin*, and, last but not least, to Juozas Gruodis' *Adagio*, attributes them under the category of "secondary emulation", which can be characterized as "synthetic". Whereas the "primary", or "direct" emulation can be characterized as "syncretic". The "primary emulation" is most often naïve and subconscious (as in early Scriabin), while the "secondary emulation" is conscious and, in most cases, sentimental. Both types of emulation often result in replication of the simplified lyric nocturnal idiom of Chopin's music, which aggravate the 'salon' image of Chopin. See Mieczysław Tomaszewski, *Muzyka Chopina na nowo odczytana*, pp. 137, 138.

[8] Mark Aranovsky, *Muzykalny tekst. Struktura i svoistva* [*Musical Text. Structure and Properties*], Moskva: Kompozitor, 1998, pp. 220, 221.

[9] Asta Andrikonytė, "Kompozitorė bando skrieti per laiko ribas" [Composer Tries to Cross the Boundaries of Time], *Lietuvos rytas/Mūzų malūnas*, June 15, 1999.

[10] Witold Lutosławski, "Savita muzikos vizija" [An Original Vision of Music: journalist J. Grzenkovicz of the Polish weekly *Culture* in conversation with the composer Witold Lutosławski], *Literatūra ir menas,* August 25, 1979.

[11] Mieczysław Tomaszewski, *Muzyka Chopina na nowo odczytana*, op. cit., p. 26.

[12] "We announce your death, O Lord, and we proclaim your resurrection, until you come in glory".

[13] According to Franz Liszt, Chopin frequently used this word to describe the primary "tone" of his music, because, as he said, there is no adequate translation for the Polish "*żal*" (complaint, lament). See Mieczysław Tomaszewski, *Muzyka Chopina na nowo odczytana*, p. 148.

[14] Such as an alternation of light and dark colour, major and minor keys, and intervals (sixths and tenths upward) typical of Chopin.

[15] Mark Aranovsky, *Muzykalnyi tekst. Structura i svoistva* [*Musical Text. Structure and Properties*], op. cit., p. 72.

[16] M. Oakeshott, *Experience and Its Modes,* Cambridge, 1933, pp. 98, 99. Quoted from: G. Tomlinson, "The historian, the performer, and authentic meaning in music", in: *Authenticity and Early Music,* NY: Oxford University Press, p. 118.

[17] Eero Tarasti, *Signs of Music. A Guide to Musical Semiotics.* Berlin, New York: Mouton de Gruyer, 2002, pp. 129–154.
[18] Ibid., p. 135.
[19] Marcia Citron considers the early 19th century to be a period of varying musical gender, full of "the masculine vigour of Beethoven's music and the feminine, or perhaps effeminate grace of Chopin's compositions". See Eero Tarasti, *Signs of Music*, op. cit., p. 130.
[20] A feminine space, which Julia Kristeva calls, following Plato, the khora, is the archaic level of consciousness characteristic of early childhood – a period before we enter the social sphere of the symbolic or patriarchal order. The symbolic order is merely the tip of the iceberg. See Eero Tarasti, *Signs of Music*, op. cit., p. 135.
[21] Ibid., p. 136. "...when the primary, archaic body – that which is *sans sexe* (...) – is affirmed, the normal syntactic-logical discursive order of the music is disrupted and an individual moment of creation enters, transcending the social norms". See Eero Tarasti, *Signs of Music,* op. cit., p. 138.

Santrauka

Šaltinių transformacija kūrybos procese:
O. Narbutaitės *Hommage à Fryderyk* „Rudens riturnelė"

Pranešime analizuojama, kokį *hommage* Chopinui sukūrė O. Narbutaitė, pasitelkusi daugybę jo kūrinių. Sugrįžtančių trijų padalų struktūroje – *A* (fortepijonas), *B* (vyrauja styginiai instrumentai), *C* (visi instrumentai), A_1, B_1, C_1, A_2, C_2, B_2, C_3 – viena iš jų (*A*) aiškiai suvokiama kaip *hommage à Fryderyk,* sąlygiškai kalbant – išorinė *hommage* pusė, nes vėliau atsiskleis ir kita – gilioji. *A* padaloje sureikšminta pianistinė Chopino muzikos idioma (M. Tomaszewskio terminija) pirmiausiai sietina su tembru, taip pat faktūra. Panaudoti Chopino muzikos fragmentai priklauso įvairioms kompozitoriaus „kūrybinio kelio fazėms" – postromantinei *in spe* (Valso *cis-moll*, op. 64, Nr. 2 pasažu pradedamas ir baigiamas kūrinys bei Delfinai Potockai dedikuotas Valsas *Des-dur* op. 64 Nr. 1), dinaminio romantizmo (Preliudas *Des-dur*, Nr. 15), preromantinei (Pirmoji baladė *g-moll* ir Etiudas *E-dur*, op. 10 Nr. 3). Nepriklausomai nuo pasirinkto „šaltinio" – valso, preliudo, baladės ar etiudo, šie Chopino muzikos fragmentai skamba virtuoziškai *(brillant),* yra transformuoti į itin smulkių ritminių verčių pasažinį judėjimą, kuris neabejotinai atspindi ekspresyviąją semantinę Chopino pianizmo idiomą. Tačiau išskirtinę reikšmę jau *A* padaloje įgyja refleksuojančio romantizmo Chopino kūrybinio kelio fazė, lyrinė noktiurniška idioma. Ji rezonuoja įvairiais būdais, dažniausiai balansuodama ant reminiscencijos ir aliuzijos bei aliuzijos ir citatos ribos.

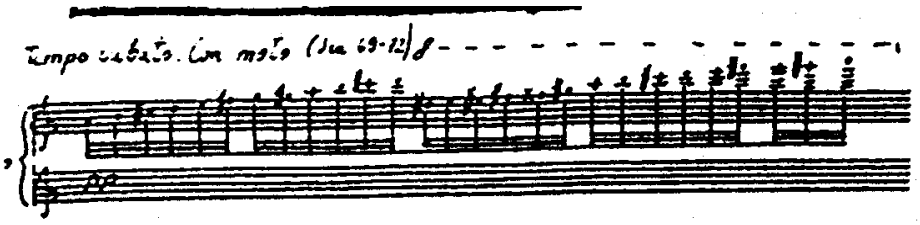
Skambant kameriniam ansambliui (*B, C*) vyrauja ne pianistinė, lyrinė noktiurniška Chopino muzikos idioma, bet nostalgiška, artima ankstesnei, tuo labiau kad kartais ir ji grindžiama noktiurnų ataidais. Tačiau „šaltiniai" čia labiau išplėtoti, tampantys metamorfozėmis. Skambėdami ne fortepijono partijoje, jie sunkiau identifikuojami kaip šopeniški. Kūrinio pradžioje Chopinas Narbutaitės parodytas kaip romantikas, svajotojas. Tačiau palaipsniui *brillant* dinamizmas priešinamas su gilia refleksija, muzika įgauna maleriškos lėtųjų tempų ekspresijos. Nutolę nuo *A* — fortepijoninių epizodų, pripinti *B* epizodo elementų, *Largo* epizodai (*C*) ypač sureikšminami.

Mirtis ir priešmirtinė vizija – tai keturių *Largo* emocinis pagrindas, o Chopino Preliudas Nr. 2 *a-moll* – *Largo* padalų muzikos šaltinis. Kiekvienas *Largo* palaipsniui didėja, plečiasi, pateikia vis naują artėjančios ir galiausiai atėjusios mirties įvaizdį. *Largo* atskleidžia skausmingą, į nebūtį atvedusį romantiko Chopino susidūrimą su aplinka. Jie semantiškai ypač svarbūs ir rodo, kad kompozitorei svarbiausias toks gedulingas *hommage à Fryderyk,* o ne romantiškai virtuoziškas, kuriuo prasidėjo kūrinys (nors klausytojai lengviau suvokia „išorinę" *hommage* pusę).

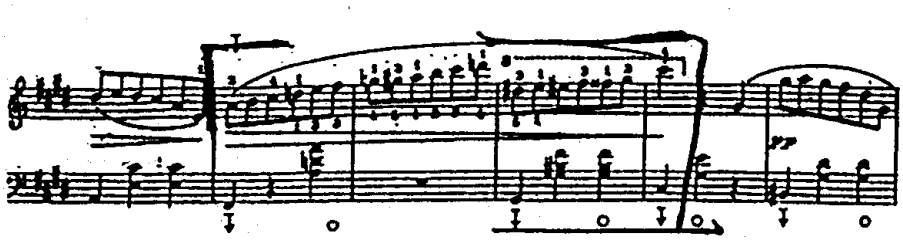
Suprasti Chopino ir Narbutaitės muzikos esmę padeda ir semiotikų (E. Tarasti, J. Kristeva) svarstymai apie muzikos kūniškumą (*body*), lytiškumą (*gender*), „khoratinę erdvę" ir su tuo susijusias transcendentines, esmines, autentiškas jos ypatybes. Chopino muzikoje egzistuojantis įvairių „kūnų" ir jų metaforų žaidimas yra apibūdintas kaip geniali romantinė kelionė iš materialaus pasaulio į dvasinę sferą (E. Tarasti). Tai ryškiai atsiskleidžia ir O. Narbutaitės kūrinyje. Didėjanti keturių *Largo* apimtis (priešingai mažėjančioms pianistinėms, sąlygiškai kalbant, „socializuotoms" *A* padaloms) sukuria artėjančios ir galiausiai atėjusios mirties įvaizdį, atskleidžia tragišką Chopino romantiko akistatą su realybe, drauge įprasmina esminę transcendentinę jo egzistenciją muzikoje.

Visiems O. Narbutaitės kūriniams būdingas individualus požiūris į tekste vykstančius „įvykius", originalus jų formavimas, dėstymas, suteikiantis opusams autentiškumo. Naudodama gausybę Chopino muzikos šaltinių, kompozitorė išlaikė būtiną pusiausvyrą: pakrypus į vieną pusę nebeliktų Chopino, į kitą – Narbutaitės.

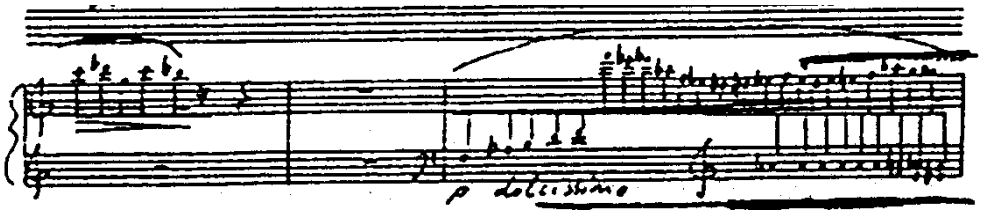
Example 1a. O. Narbutaitė, *Autumn ritornello*, score p. 1.



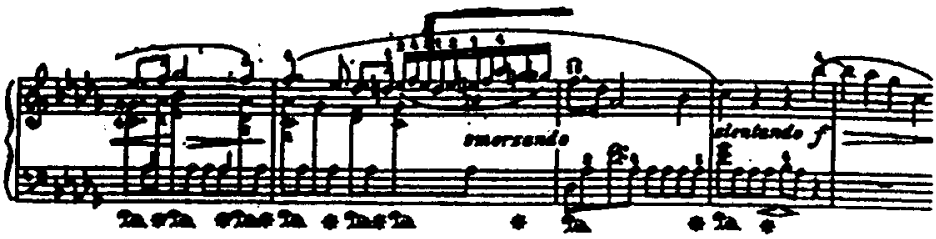
Example 1b. F. Chopin, Waltz in C sharp minor, Op. 64 No. 2.



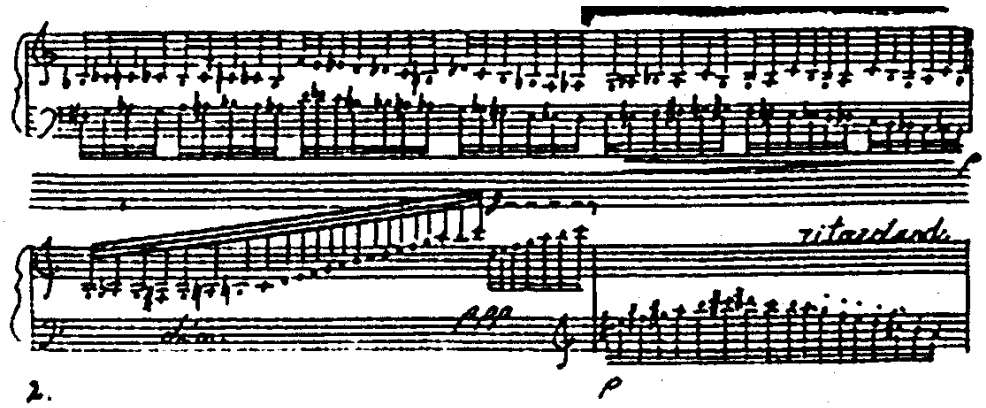
Example 2a. O. Narbutaitė, *Autumn ritornello*, score p. 12.



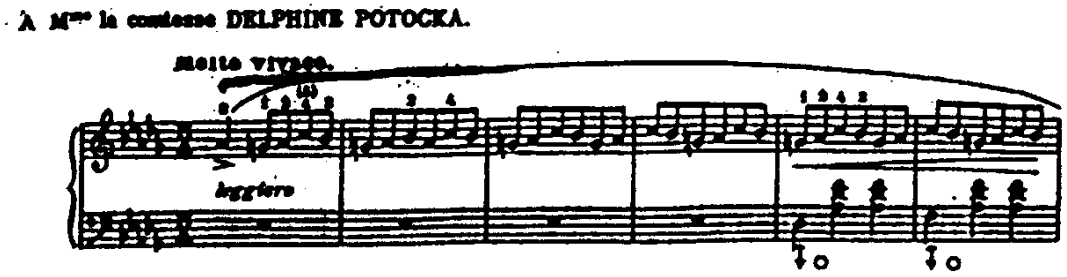
Example 2b. F. Chopin, Prelude in D flat major, Op. 28 No. 15.



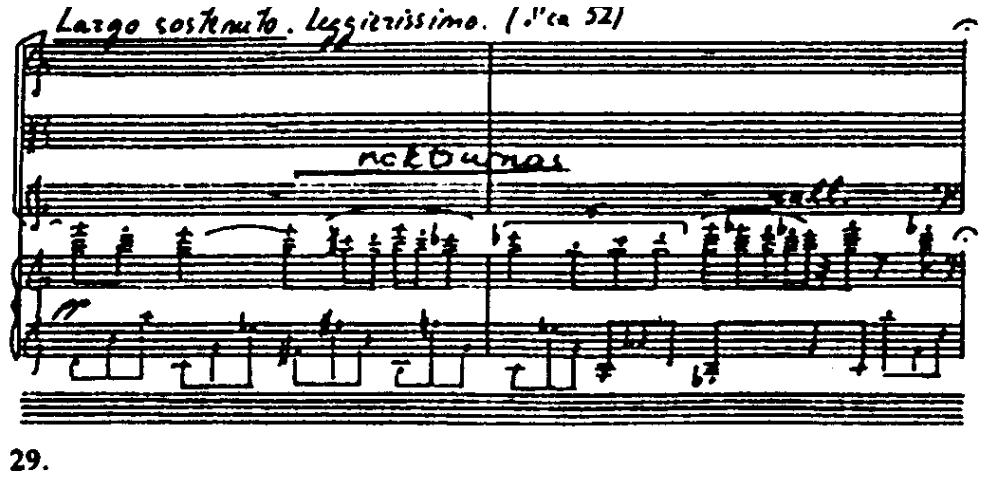
Example 3a. O. Narbutaitė, *Autumn ritornello*, score p. 2.



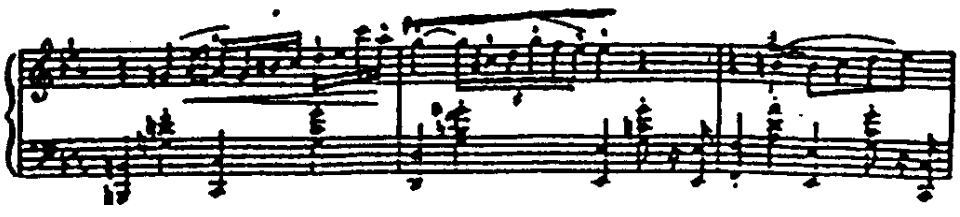
Example 3b. F. Chopin, Valse in D flat major, Op. 64 No. 1.



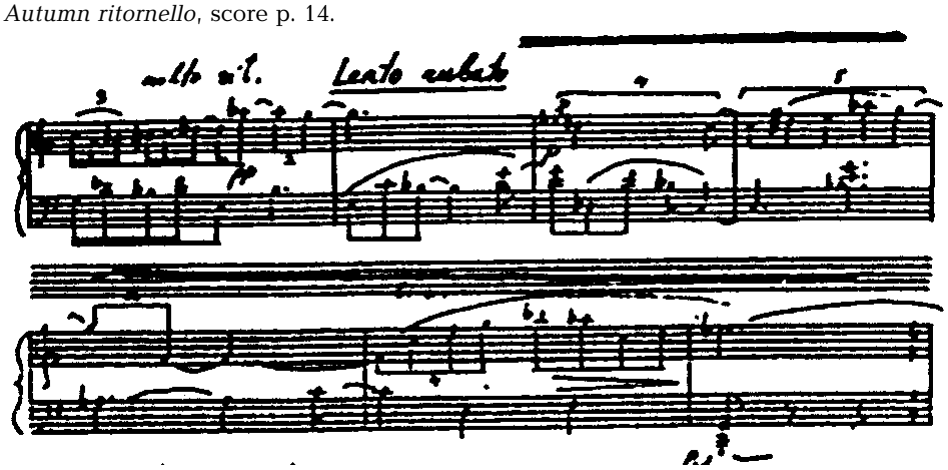
Example 4a. O. Narbutaitė, *Autumn ritornello*, score p. 29.



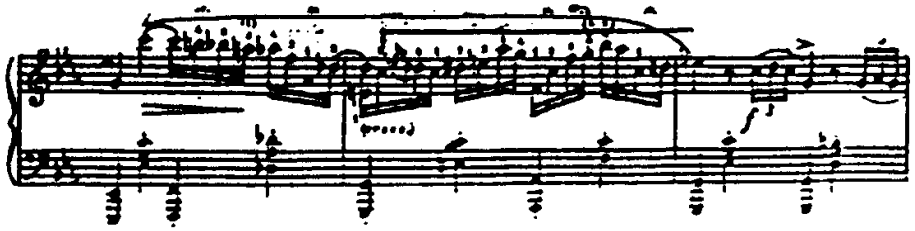
Example 4b. F. Chopin, Nocturne in C minor, Op. 48 No. 1.



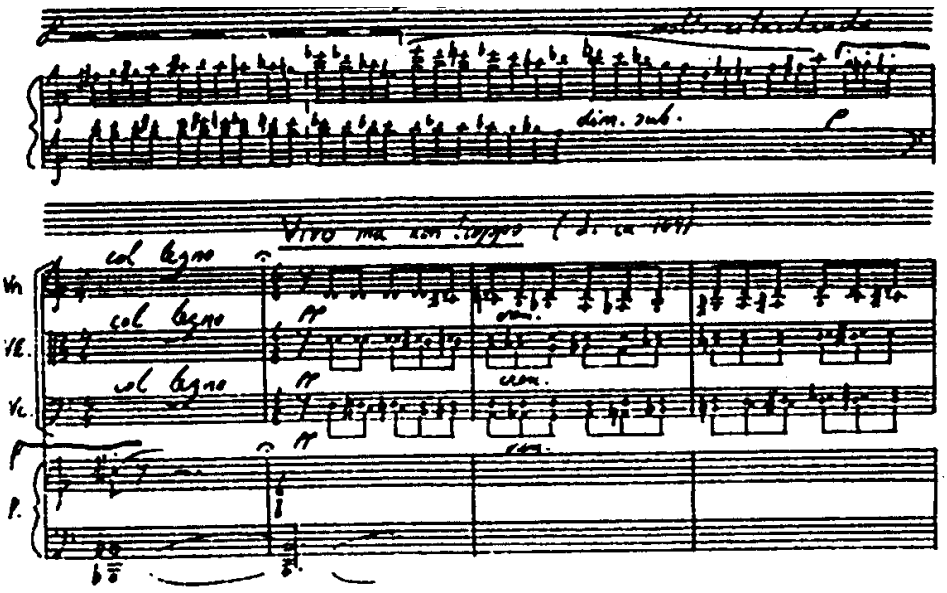
Example 5a. O. Narbutaitė, *Autumn ritornello*, score p. 14.



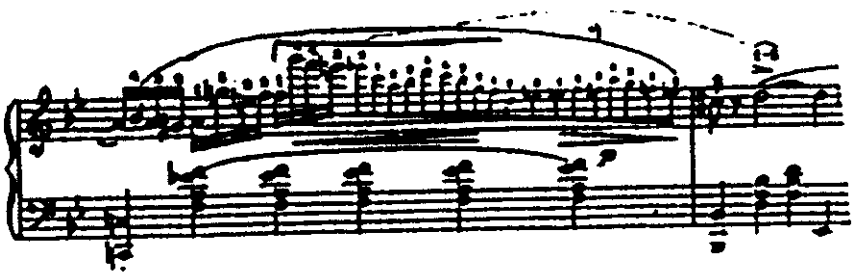
Example 5b. F. Chopin, Nocturne in C minor, Op. 48 No. 1.



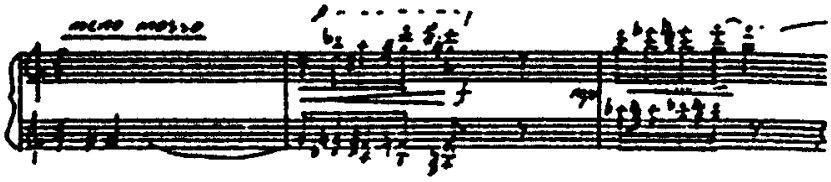
Example 6a. O. Narbutaitė, *Autumn ritornello*, score p. 5.



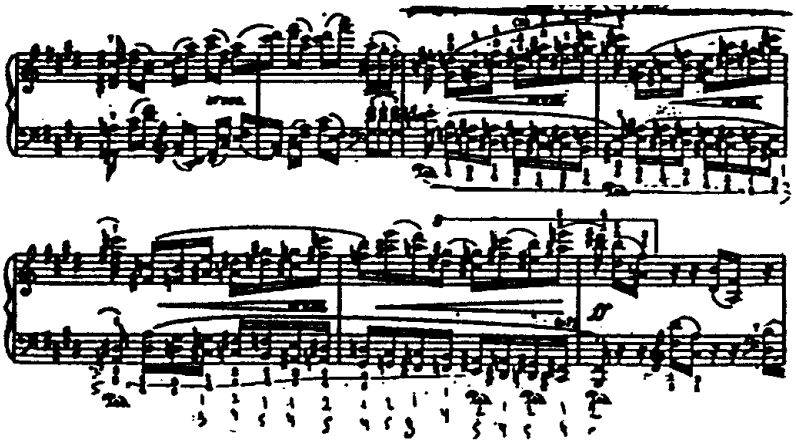
Example 6b. F. Chopin, Ballade in G minor, Op. 23.



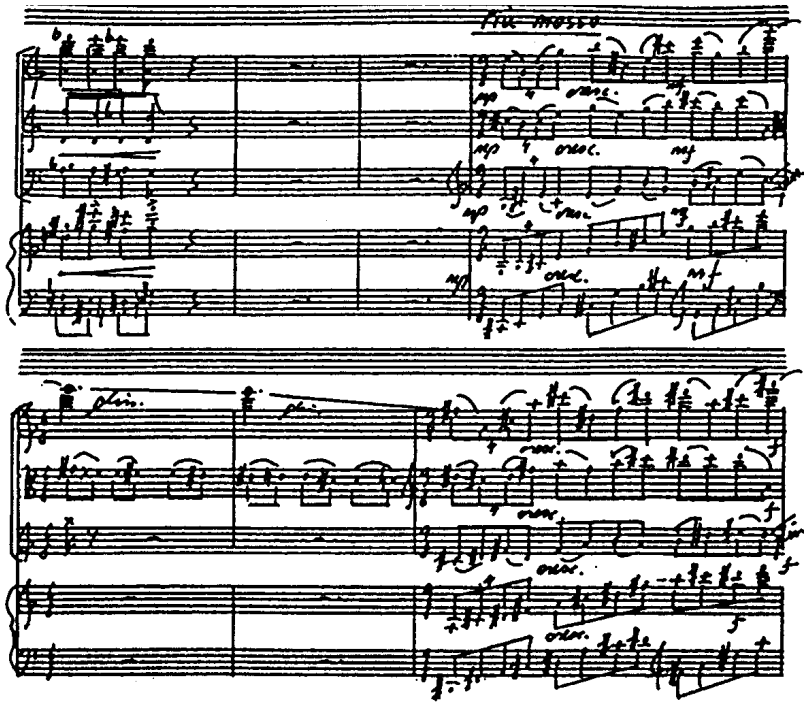
Example 7a. O. Narbutaitė, *Autumn ritornello*, score p. 21.



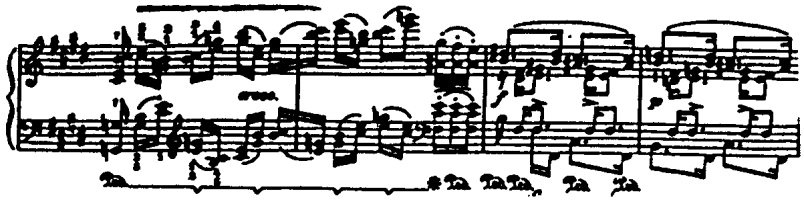
Example 7b. F. Chopin, Etude in E major, Op. 10 No. 3.



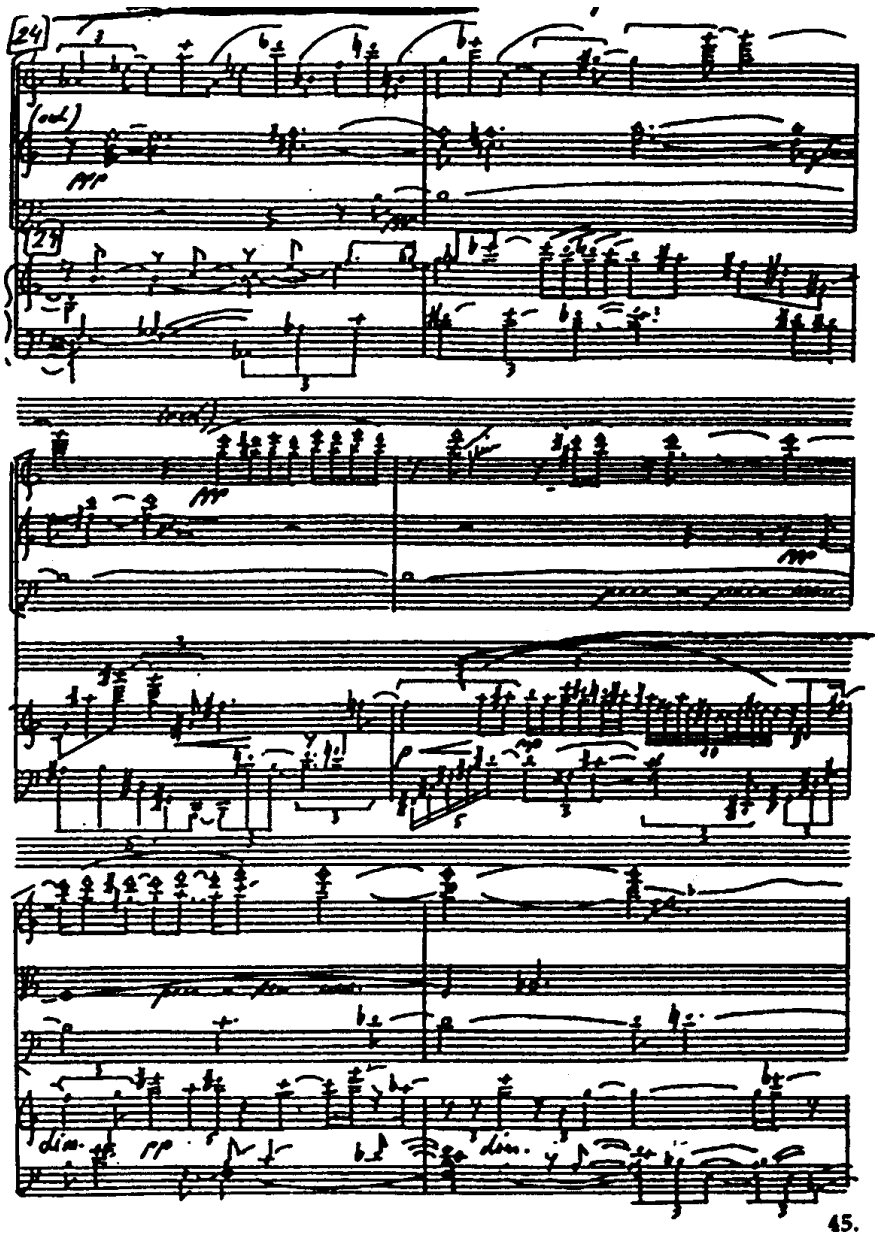
Example 8a. O. Narbutaitė, *Autumn ritornello*, score p. 32.



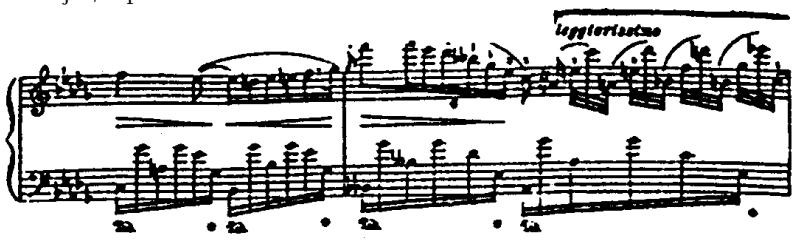
Example 8b. F. Chopin, Etude in E major, Op. 10 No. 3.



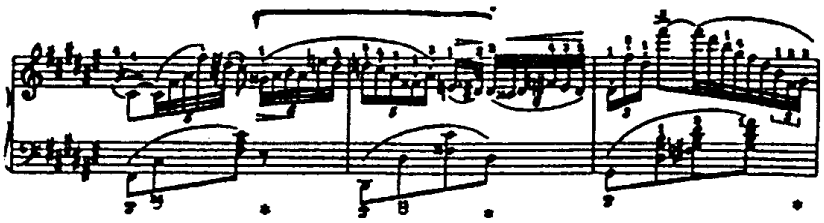
Example 9a. O. Narbutaitė, *Autumn ritornello*, score p. 45.



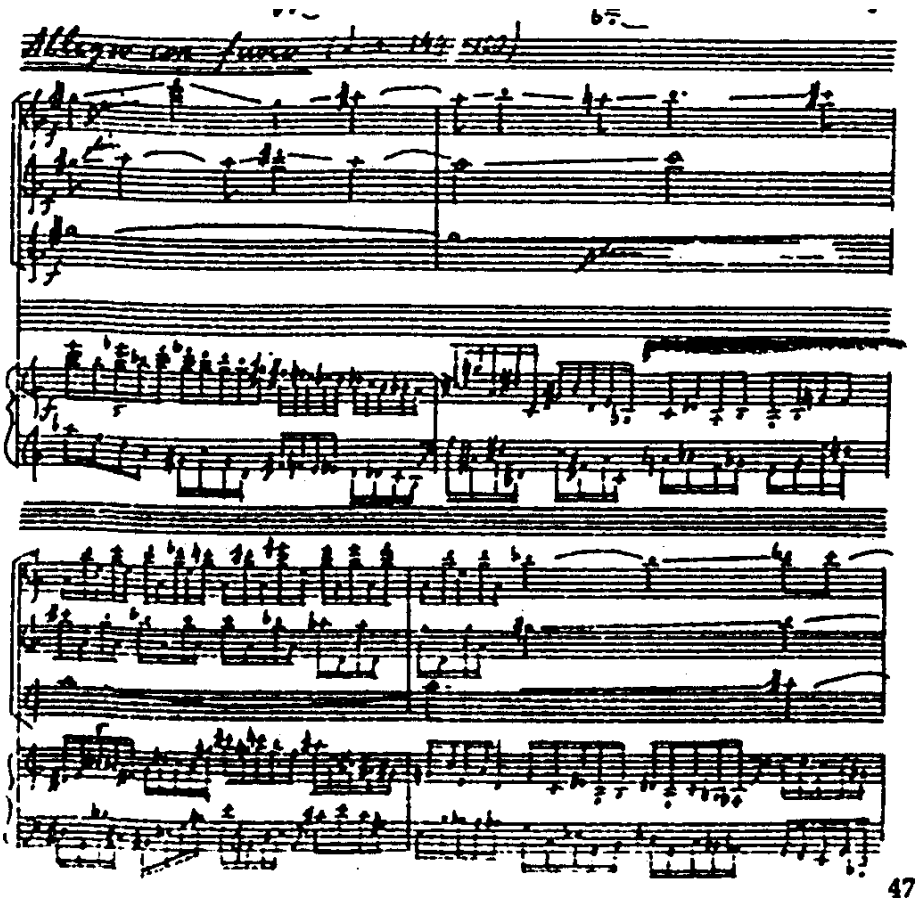
Example 9b. F. Chopin, Nocturne in D flat major, Op. 27 No. 2.



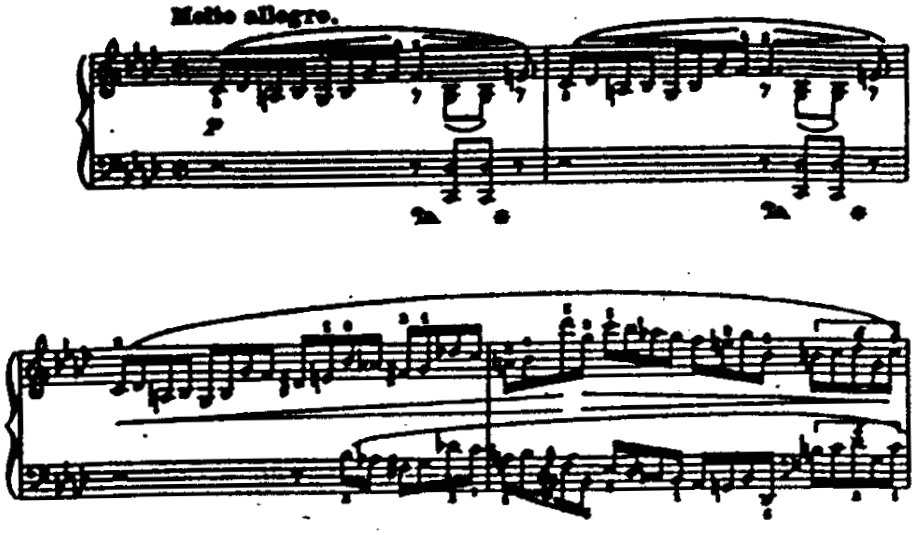
Example 9c. F. Chopin, Nocturne in F sharp major, Op. 15 No. 2



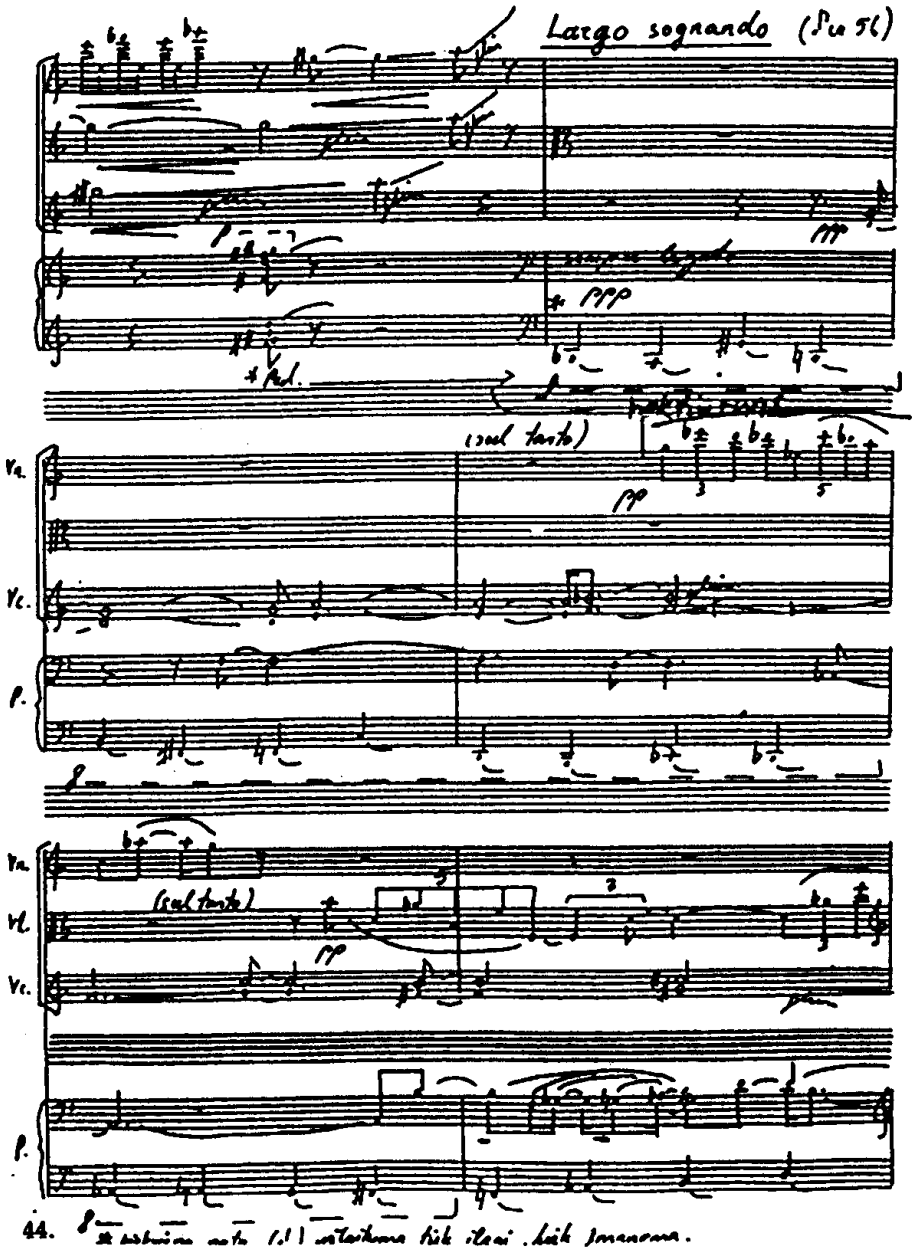
Example 10a. O. Narbutaitė, *Autumn ritornello*, score p. 47.



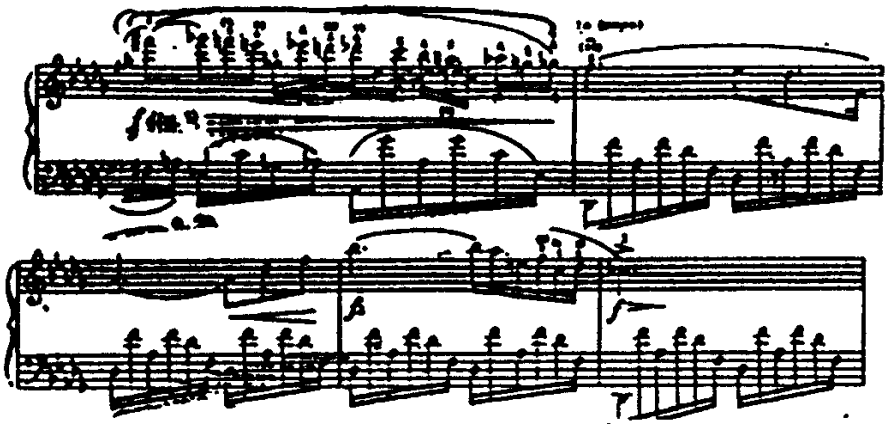
Example 10b. F. Chopin, Prelude in F minor, Op. 28 No. 18.



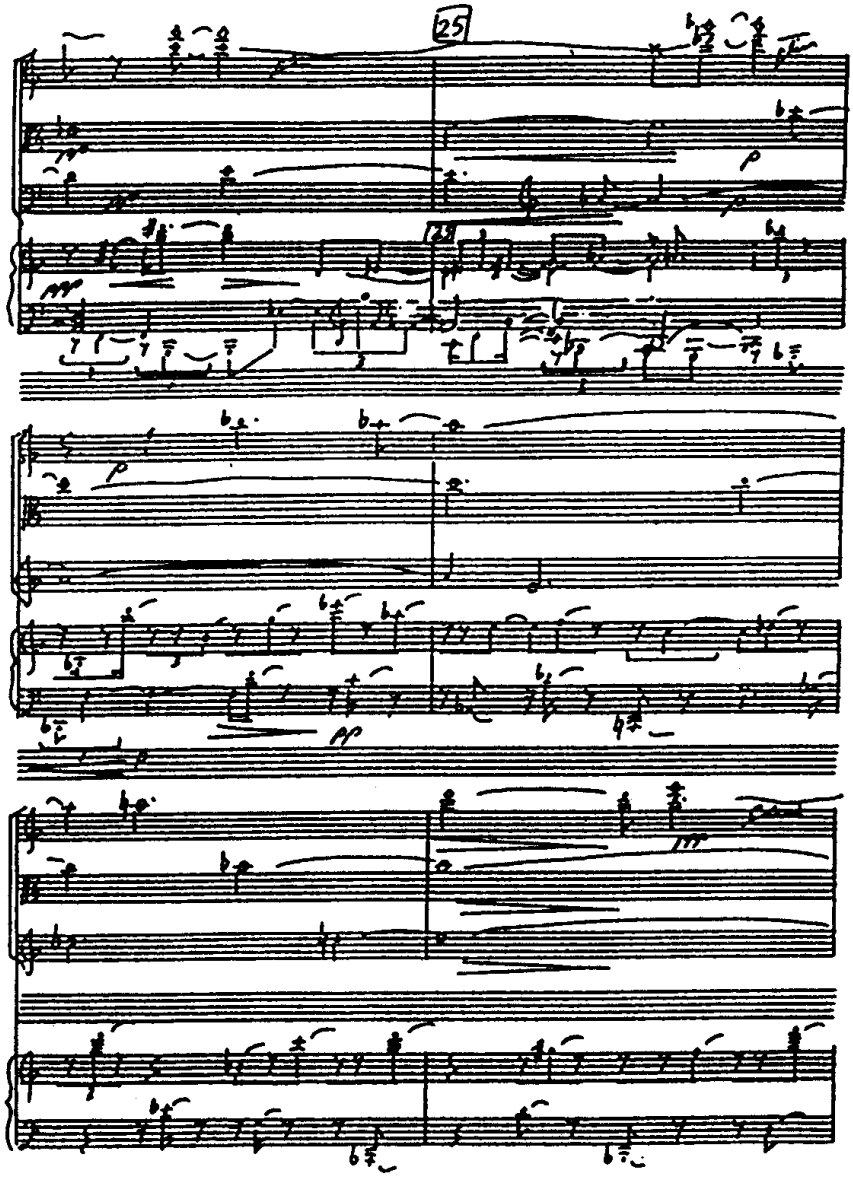
Example 11a. O. Narbutaitė, *Autumn ritornello*, score p. 44.



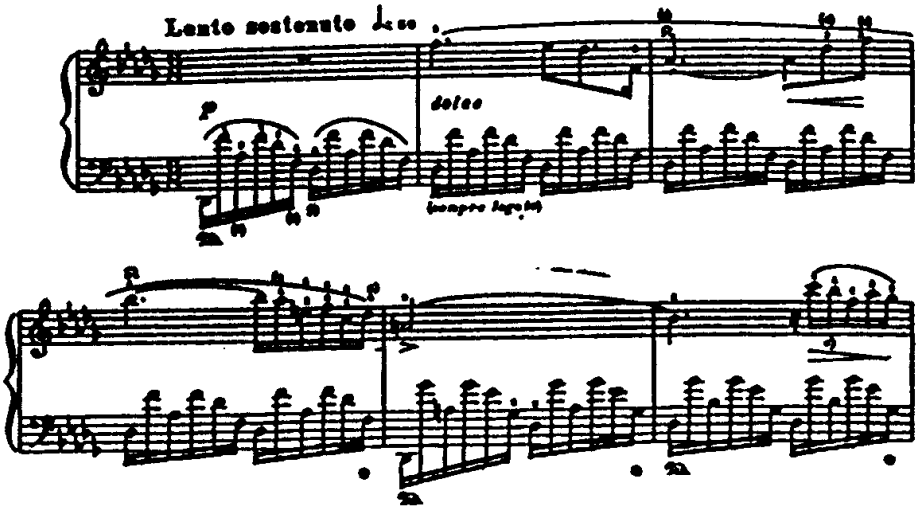
Example 11b. F. Chopin, Nocturne in D flat major, Op. 27 No. 2.



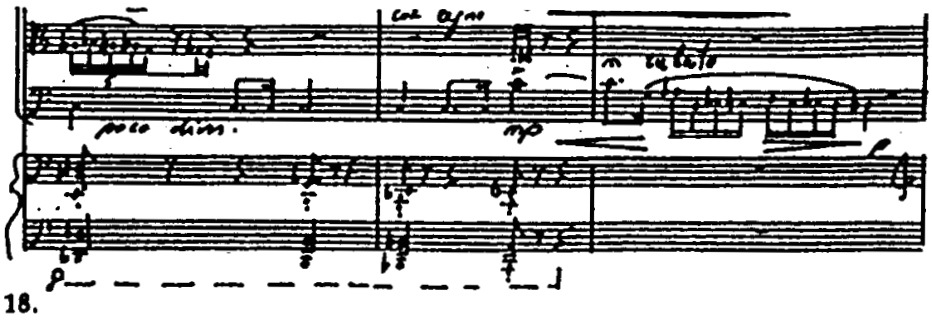
Example 12a. O. Narbutaitė, *Autumn ritornello*, score p. 46.

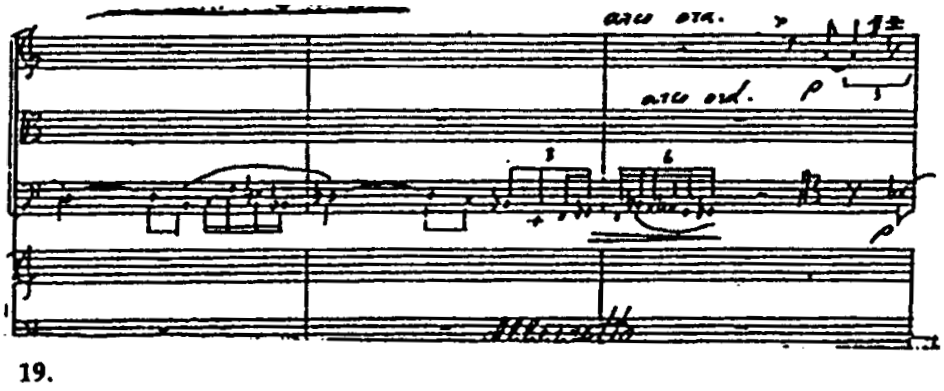


Example 12b. F. Chopin, Nocturne in D flat major, Op. 27 No. 2.

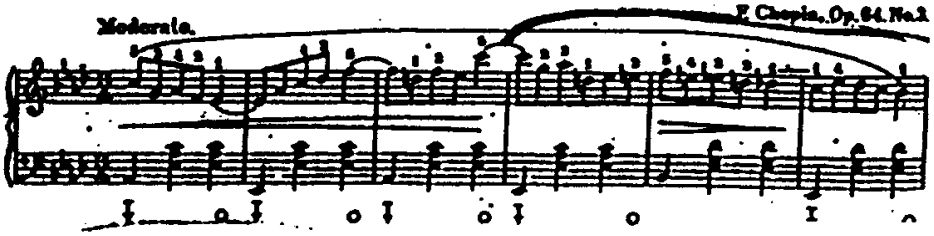


Example 13a. O. Narbutaitė, *Autumn ritornello*, score p. 18, 19.

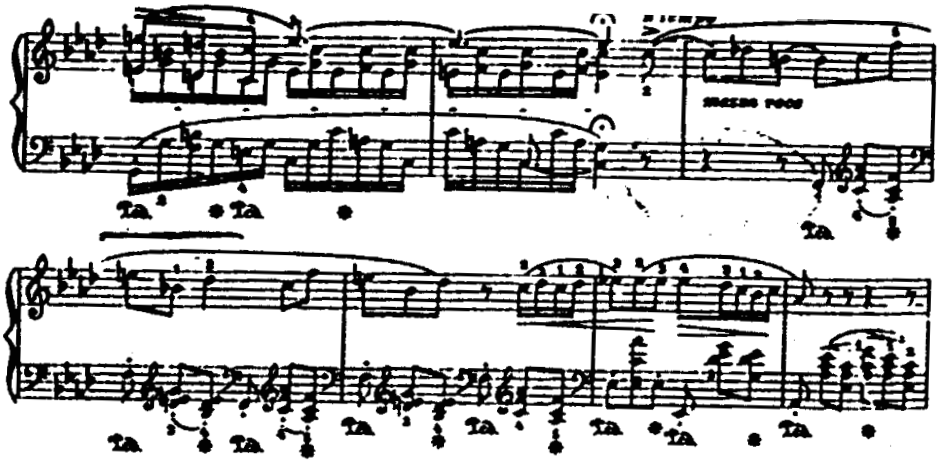




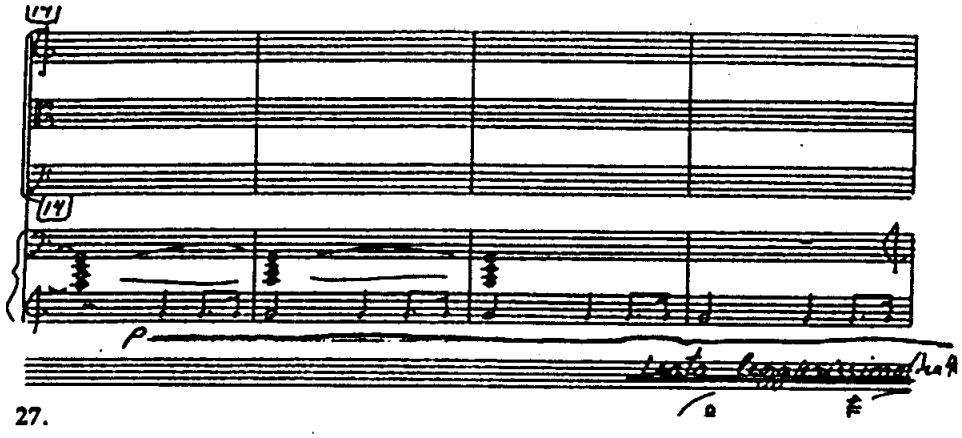
Example 13b. F. Chopin, Waltz in A flat major, Op. 64 No. 3.



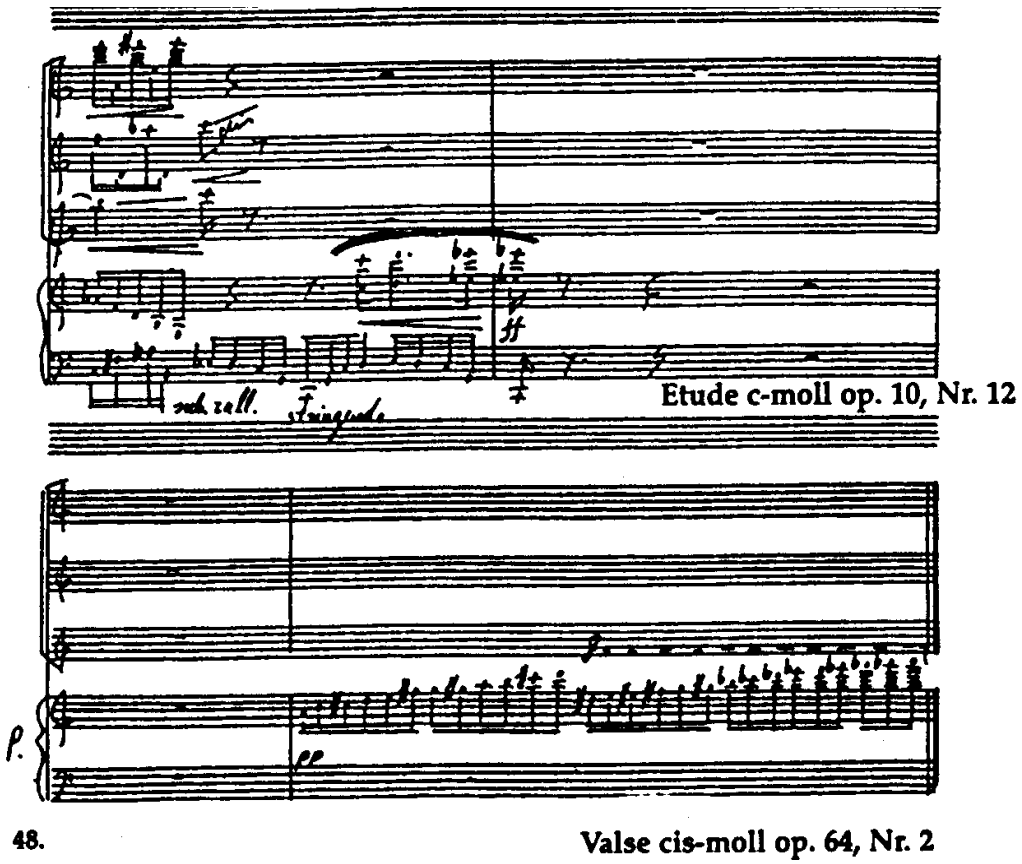
Example 13c. F. Chopin, Ballade in F minor, Op. 52.



Example 14. O. Narbutaitė, *Autumn ritornello*, score p. 27.



Example 15. O. Narbutaitė, *Autumn ritornello*, score p. 48.



Leon Stefanija

The Idea of the Absolute in Music as an Idea of Processuality: The Case of Uroš Rojko

Summary

The aim of this paper is to rethink the epistemological question about the putative incommensurability of a musical poetics and aesthetics with aspirations comparable to the notion of "the absolute music". The predominantly instrumental oeuvre of Uroš Rojko (b. 1954) – the work of one of the most distinguished Slovenian contemporary composers – is taken as an example and discussed as a concrete reference illuminating the idea of the absolute. Rojko's artistic intentions, leading to the notion of music as a "sublime physiological stimulus" – with no semantic potential "from without" – are illustrated with one example from his opus (*Sinfonia concertante*, 1993) and further on discussed in the context of analytical demands posed on his work by the composer himself and epistemological possibilities concerning modes of listening to his music as "simulations" of creational processes that might lie behind his work.

Keywords: postmodernity, aesthetics, music perception, music analysis, music theory, Uroš Rojko, Slovenian music.

The Aim. The aim of this paper is neither to initiate some *revival* or *renewal* of the "old" aesthetic idea of the absolute nor to extol Rojko's music. My intention is to rethink the epistemological question about the putative incommensurability of a musical poetics and aesthetics, from which Rojko's predominantly instrumental opus has come into existence since the 1980's with its distinctive claim to "the absolute" as a form of "detached", "free" (A. von Massow: "'losgelöste', 'freie'") music.

A sketch of Rojko's compositional procedures

Far from otherwise necessary analytic demonstration of Rojko's compositional techniques, the development of the musical flow in his three-movement *Sinfonia concertante* (1993) could be considered as a fine example of his musical logic since the middle of the 1980s.[1]

The first movement is founded on a motif-complex consisting of a central pitch (c in pf.) that is being encircled chromatically and microtonally by the neighbouring pitches (d–g in alto flute and c–g in the English horn) leading toward an allusion of a dominant cadence (in m. 16; see Figure 1).

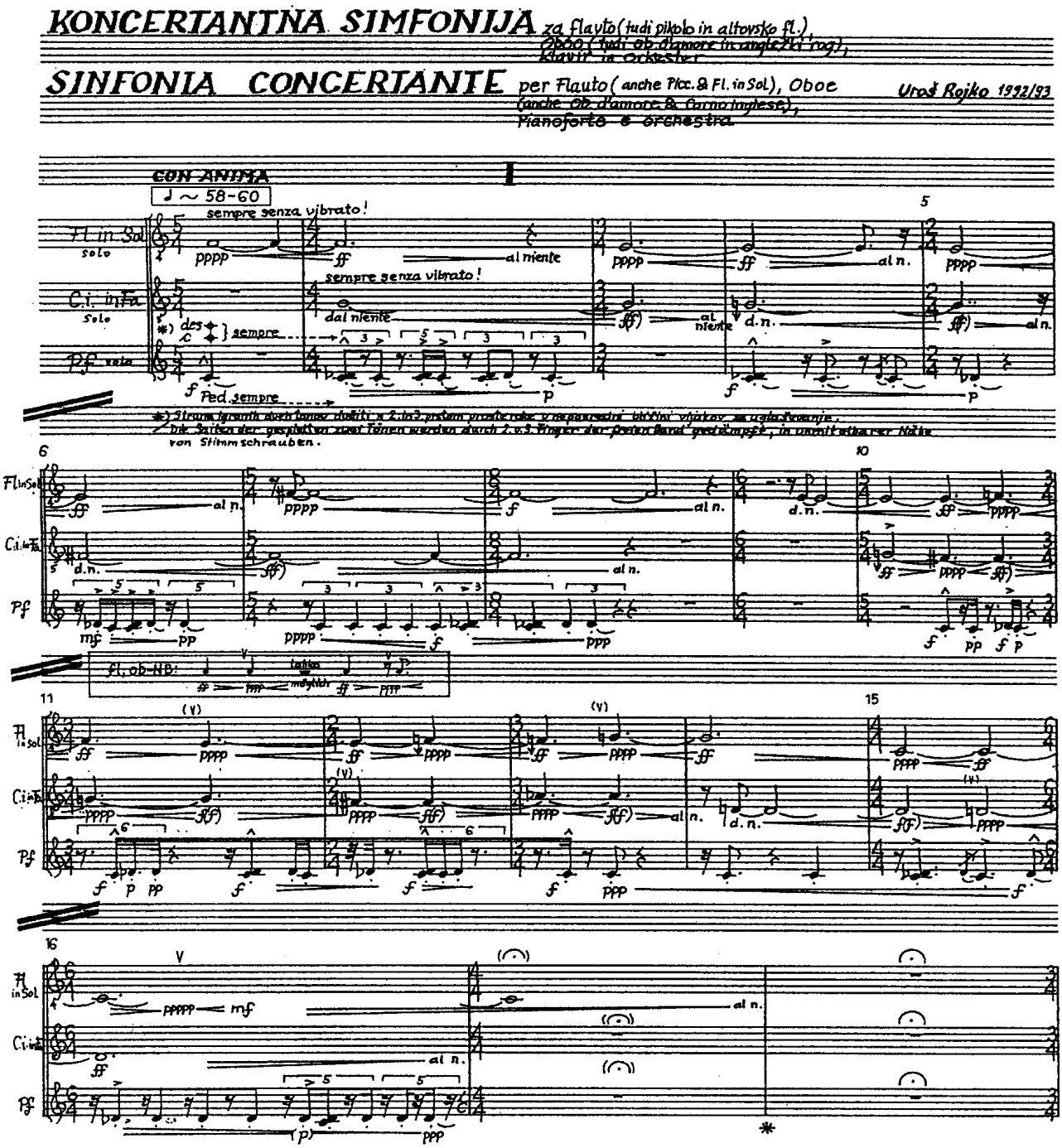
The second movement is founded on a kind of *developing motif*. It is compounded with rhythmically differentiated embellishment-like pitch patterns. The main difference between the motif complex in the first movement and the developing motif of the second movement is apart from their pitch setting above all in their rhythmic flow and pitch saturation. The motif in the second movement is made of rhythmically motoric figures (in the first movement a more complex rhythmical patterning was involved), whilst the texture becomes denser and consequently the formal direction becomes less obvious (Figure 2).

In the third movement, the main features from both preceding movements – the dynamically, agogically and rhythmically refined pitch encircling and patterning of a single voice in a sensuous polyphonic web – are combined. The texture consists of a series of differentiated *glissandi* motifs, oscillation patterns with a central pitch (Figure 3).

This "browsing-analysis" of the expositions of the three movements from Rojko's *Sinfonia concertante* indicates a kind of "complex simplicity" specific to his work. The composition – written as a "present to the beauty of the spectral dimensions of the symphonic sound"[2] – is a well rounded off whole with almost school-like formal clarity of each movement according to Aristotelian dramaturgy: beginning – core – conclusion. The whole cycle is formed according to an idea of a dynamic acceleration of a single "developing motive". There is a similarity, for instance, to Ligeti's *intervallic seed crystal* or Ferneyhough's *figure* as well as to the spectralist's approaches, although the Schoenbergian *Grundgestalt* way of thinking is difficult to ignore.

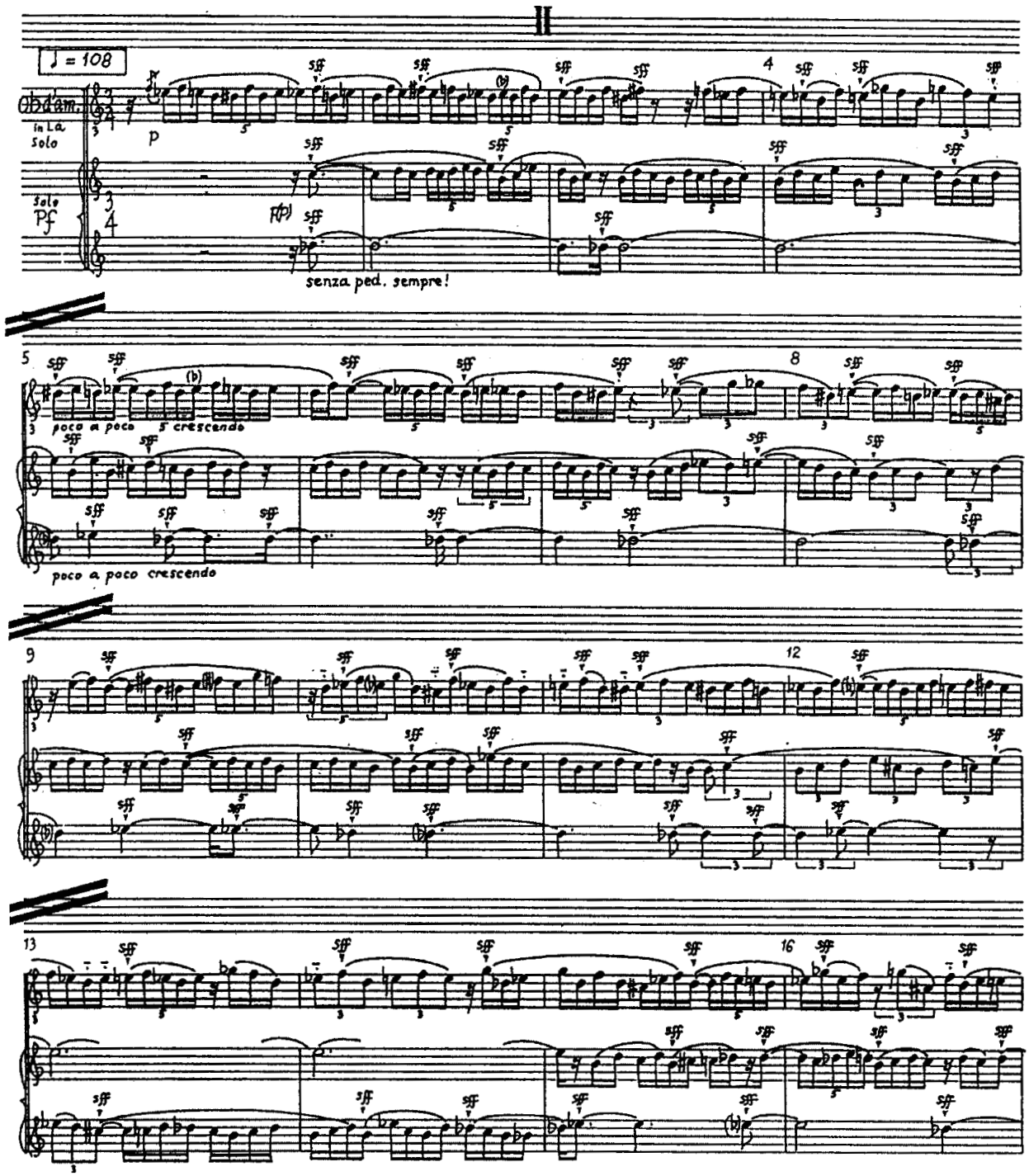
Of course, quite a few analytical questions may arise. But the main analytical focus should be, I believe, outlined as follows.

Figure 1. The first movement



The utterly elementary and finely elaborated conception of the whole, entailing a complex patterning of the musical flow, cannot be theoretically limited to various offsprings of the organicistic theory. It appears equally reasonable to discuss Rojko's compositional procedures in terms of physicalistic ideas founded on semantical universals, for which the concept of music as "energetics" (Rudolf Schäfke)[3] could be reckoned as a centripetal epistemological idea.[4] At this point it seems that the work has emerged out of a "pure", as it were, "absolute" musical logic, but at the same time the "purity" could be questioned because of salient physicalistic features of the musical flow that can hardly be confined to music alone.

Figure 2. The second movement



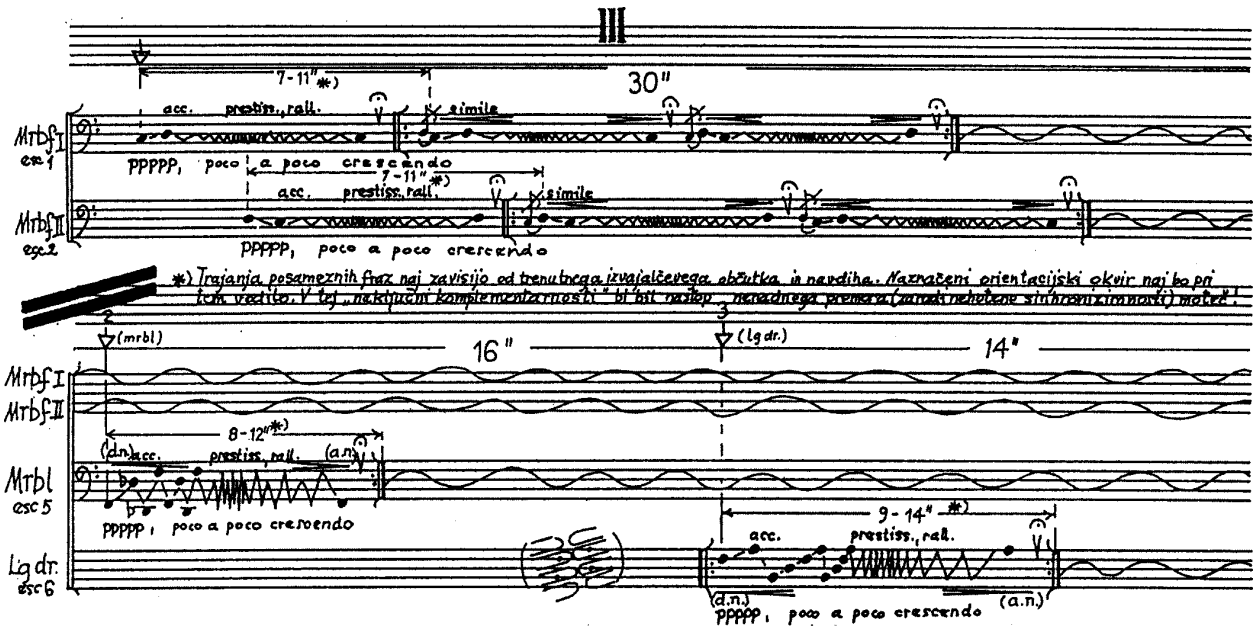
Uroš Rojko and his ...

... experiences with the musical avant-garde

Before coming to the possibilities of cognizance of Rojko's musical structures, the following information about his work could give a rough but sufficient insight into the historical provenance of his work and his notion about the "absolute purity" of his work.

After he took his degree in clarinet (1975 in the class of Franc Tržan) and composition (1981, studied with Uroš Krek) at the Academy of Music in Ljubljana (Slovenia), Rojko (1954) proceeded with his compositional studies under artistic guidance by two classics of the avant-garde music of

Figure 3. The third movement



the second half of the 20th century: Klaus Huber (1983–6) and György Ligeti (1986–9). In spite of his genuine devotedness to the new in music, three years of studying composition with each of them – in Freiburg and Hamburg respectively – cast rather annoying doubts on Rojko's notion about contemporary composition.

Although the musical experience that binds Rojko to the "tradition of the German and European avantgarde" played an important role in his artistic growth, he "did not accept it"[5]. Moreover, he reckoned it as "a dead end"[6]. Especially Ligeti, "leading [him] with his guru-like poise into uncertainty and horrible split"[7], has awakened Rojko to distance himself not only from the avantgarde but also from any other historical environment.

Thus Rojko is inclined to think about (his) music in terms of ahistoric seclusion: "What I've been doing now, in the last five years," emphasized Rojko in the middle of the 1990s, "is above all liberation of myself. I try to understand everything as translating, canalizing of primary energies into a palpable substance."[8] This is one of most clear self-references that Rojko has uttered about his music: writing music is for him a kind of somewhat esoteric process of *translating* "primary energies" into sounding phenomena.

... view on contemporary composition

One of the central features of Rojko's explicit musical poetics is the indicated process of *sublimation* – the "canalizing of primary energies". And this sublimation, as conceived by Rojko, goes hand in hand with the presently enfeebled interest in the "postmodern frivolousness" ("acritico modo di produrre"), as he declared affectionately in a recent interview asserting the relatively strong "restitution of the intellect" in the music of the last few years. Rojko reckons the "postmodern looseness" and a growing interest in "idiomatic" and "more complex things" to be a return toward "fundamental principles of art" ("*basso principio artistico*")[9] which he favours over any semantically more loaded differentiated compositional techniques.

... comprehension of the aesthetic function in music

In spite of Rojko's artistic maturing in the tradition of "the critical avantgarde" – and his "critical way of thinking" lives in his musical logic as a set of rigorously thought out compositional procedures and methods – the composer doubts in the efficiency of a compositional system. A "system proves nothing", warns Rojko. What counts is the result: "What you can make out of a system".

Similarly dubious in his eyes appear also the idea about "new" compositional means of expression and, consequently, the ideal of a progress in music, although, he concedes: "The idea

of the new was at the time when I was occupied with serialism and New music very important". His mature belief about the aesthetic function thus leads him to think that music should pursue sonic forms capable of embodying – and this is his mature musical ideal – the universal ideal of the *beautiful*. Rojko described it with these words:

> *Basically, I am striving to achieve beauty that has something profound, that has a base. This base does not belong to our world. It is something that our world cannot offer, although it is founded thereof. I would certainly not like to bring my music to the point of a New Age or similar [cultural phenomena], where the only goal is to reach a therapeutic condition [...]. I have no therapeutic intentions with my music. My music borders more on a natural experience, it tries to reach a sense of well-being. My life turned out in a direction along which I am searching for some other world. The music expresses it and is a part of me.*[10]

Rojko's postulates an "awakening of the human's sensitivity in recognition and comprehension of more subtle sonic layers," where one should speak of "cultivation of the ears" on account of an almost ecumenical end: "to improve the human being through the medium of sound".[11]

However, *modernistic* a stance might be reflecting through the quoted artistic intention, contrary to the intellectual pretentiousness, or the ideological provocativeness, of the musical avantgarde, Rojko expects from his listener almost nothing. Persuaded in the "untranslatability" of the musical narrative, he believes that for both — for the composer as well as for the listener — it is necessary to "let the events happen by themselves, and let music and musical material unfold by itself".[12] For this reason he is drawing attention to the "innermost" of the sound, unimpeded by mimetic analogies: "The most important truths are by no means explicable, the least with words, and they cannot be analysed by the intellect. They can be reached only by experience, or perceived."[13]

The quoted thought should be seen as the central philosophical persuasion as well as aesthetical demand posed by Rojko: he wants his music to achieve the efficacy of *a sublime physiological stimulus* – with *no semantic potential* "*from without*", not even from the past experiences with music.

Cognitive correctives

Terminological note on the notion "absolute"

From Rojko's explicit poetics it is rather obvious that his views by and large belong to a compositional tradition of imaging the "pure essence" of music within the ideas of the "absolute music". The term is problematic above all because the temporal distance since the first use of the notion "absolute music" in Wagner's writings more than 150 years ago has accumulated heterogeneous meanings of this notion[14], referring to different epistemological levels:

1) *to a broad cultural level: music as a paradigm for art* (axiological change in appreciating instrumental music at the end of the 18. century, or, historiographically, interpretation of styles as "absolute", for instance: classicism and neoclassicism, in more recent times, *musique spectrale*);

2) *to compositional and musical theory derived from instrumental music* (centred on the notion of "musical logic", whilst the category of "musical prose" has a partly ambivalent position as a term referring to "expressionistic logic" as well as to processes applied to music "from without", such as language analogies to musical syntax); and as

3) *a synonym for "pure" aesthetic reception* (as a synonym for: a. functionally "disinterested" listening, b. "incommensurability" of the musical narrative, c. "sensuous" perception, d. "structural" cognition of a supposedly a-mimetic phenomenon).

All these meanings can be found in Rojko's musical poetics.

According to Albrecht von Massow, who offered a fine survey of the term, "absolute music" is "a negative definition, which, as a reflective notion, resists oblivion only at the idealistic level, because there is no corresponding empirical fact to prove the exact meaning of the word"[15]. Consequently, he argues, it is "a normative concept for composition as well as reception"[16]. Therefore, analysis of the notions of the absolute that have enabled disputes about the essence of music since the 19th century resembles an "open project" of the demarcation of its meanings. And one of the main problems in its history is not "that the music has been understood metaphysically" – or in the above mentioned senses – "but how is it understood metaphysically"[17]. I would like to offer an answer to this question that might be useful for further juxtapositions of musical works comparable to those by Rojko.

Epistemological elusiveness

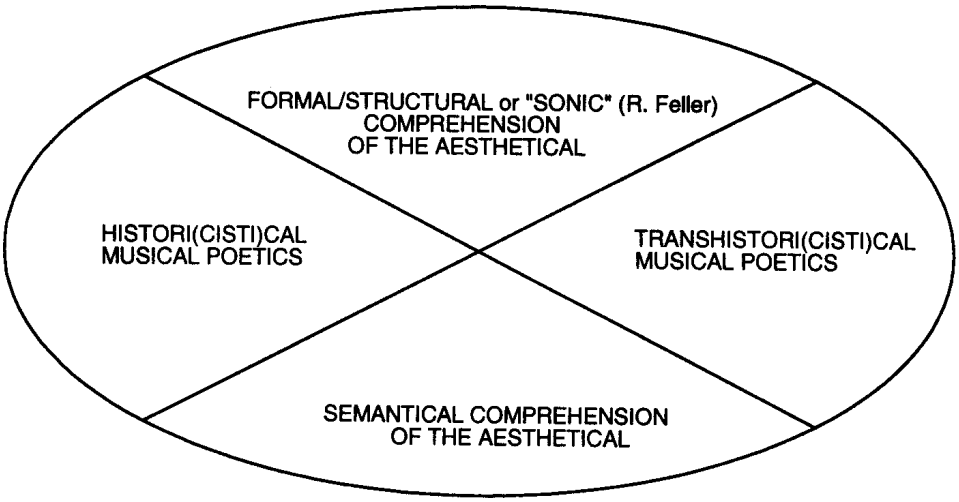
At this point, Rojko's mentioned intentions could be discussed from within different epistemological viewpoints. Be it compositional, cognitive, hermeneutical, sociological, broad anthropological, or any other interpretative stance, Rojko's persuasion about the "pureness" of his musical poetics is questionable as much as his "physicalistic" analogies could be reckoned as mimetic universals of human experience. Namely, his inexhaustible reiteration about "pure" physical qualities leads toward a universalistic view of music, in which a strong sense of semantic *pregnancy* is clearly discernable (especially in the carefully thought-over compositional details). But the main *specific,* more or less *tangible* qualities to which Rojko is constantly referring in his interviews and lectures, is the equality between the body, physical experience and metaphysics of the absolute.

If any analytical vocabulary would match Rojko's view of (his own) music, it would have to be suchlike to direct all its susceptibility for "delicate metaphors" (B. Bujić) toward antinomies between the world of an aesthetic autonomy[18] and experiential pregnancy.

Historical embeddedness ...

If, on the one hand, Rojko's explicit musical poetics tries to diminish the relevancy of its historical position (which is obviously enough: a part of post World War II modernisms), on the other hand it seems to be reflecting itself as a constant search for "the surplus", "the noncomparable", "the unique", "the absolute" in reshaping compositional techniques from the older traditions, such as early Renaissance or Baroque, and combining them with some features from different musical poetics, specific to the period from the 1960's onward.

To use a schematic simplification of two premises, one poetological (comprising the relations toward the past) and the other aesthetical (comprising the semantic qualities of the musical structure):



Rojko's work could be easily embedded into the right part of the oval.

Of course, embedding itself above specific historical currents, the sensuous, physicalistic aesthetics of Rojko's music, entailing a palette of colourful sonic patterning, allows much greater variety of historical or imagery parallels than he is prepared to admit. A comparison between his music and the philosophy (and practice) of – but by no means with the aims and the media involved in – New Age art, minimalism, some non-Western musical ideals as well as aesthetics of a part of the electroacoustic tradition seems fairly reasonable. Rojko's music further reveals some compositional and aesthetic analogies with the music of – to name but a few – Giacinto Scelsi, György Ligeti, of "musique spectrale". It is comparable also to the music of some composers connected with the ideas of New Complexity, on whom Claus-Steffen Mahnkopf in 1997 bestowed a kind of historical hallmark: the "Second Darmstadt School"[19]. But at the same time, the idiosyncratic compositional solutions could be compared to some mannerisms of Ars subtilior, motivic

work to different solutions of the Schönbergian "entwickelnde Variation", whilst the formal clarity of Rojko's work has peers in the organicist ideals of the classicist-romantic tradition and its models of two- and three-part movements, as well as in the transhistorical multisectional patterning of the musical flow.

Actually, Rojko's musical logic almost demands rethinking the possible historical parallels and their epistemological positions within a much broader time-span than his immediate connectedness to the musical avant-gardes of the second-half of the 20th century would suggest. Speaking in terms of a frequent opposition between *poetic* and *aesthetic* interpretation of music,[20] however, Rojko wants his works to be heard as "purely aesthetical", "structural", "formal" phenomena. Its "connotative" potential is carefully contrived: in different forms of meticulously elaborated sonic fractals, carefully dispersed and elaborated throughout refined architecturally lucid forms that show hardly any "denotative", "contextual", "referential" signs – a feature of many so called postmodern "inclusive" musical poetics. The main "references" in Rojko come to an end in a set of universal "energetic" categories, centred in the notion of musical *gestures*, far from being historically definable as topics or tropes in R. Hatten's or Raymond Monelle's sense.

... or historical evasiveness?

This rather ample palette of possible parallels to his work enables a characterisation of his music as a result of: artistic freedom, but not frivolousness; constructivism, though exclusively to attain "natural experience" with the composed music; an intellectually demanding way of composing, nonetheless only in the name of all the human senses; semantically unloaded aesthetics, though with a strong appeal to semantic all-inclusivity, to an "absolute" meaning, as it were, comparable to the "metaphysical aesthetics" (C. Dahlhaus) of the 19th century instrumental music.

It might seem that such a compositional "escapism", founded in a physicalistic notion of music that offers to take into account a proposition made by Fred Lerdahl about contrasting musical *complexity* with *complicatedness*[21]: Rojko's music is structurally fairly complex, but the aesthetic effect is far from being complicated.[22] It demands concentration, but it is never perplexed.

The emphasis on metaphysical imagery of the absolute is not, I believe, a coincidental whim of a composer living at a time in which historical parallels are as ubiquitous and inevitable as they are undesired as being presumably superfluous and presumably improper for discussing musical culture of accentuated individualism. After all, Rojko's creative intention is adroit in leaving clearly formulated metaphysical ideas adrift for any historical or semantically palpable parallels: as if the aesthetic function of his music were trying to hide its cultural roots. His entire creative being seeks to achieve a kind of ahistoric state with universalistic semantic features, reducing the possibilities of equalisation of his work with others' work because of numerous possible parallels and, above all, because of a universalistic musical logic that is by no means specific only to modernism (or avantgarde) of the second half of the 20th century, but is a substantial, albeit imponderable part of the history of compositional ideals.

Of course, the universalistic aspirations open up an imagery about the aesthetic function in a perplexing way. After all aesthetic universalism is one of the central points in the work of stylistically as diverse composers as Charels Ives, Edgar Varèse, Olivier Messiaen, in a large part Karlheinz Stockhausen, George Crumb, Brian Ferneyhough, Peter Maxwell Davis, Gérard Grisey, Lojze Lebič, Arvo Pärt, or Tôru Takemitsu, among others.

Compositionally, Rojko's works can be set in a row within musical avantgards since the 1960's, especially with *musiqe spectrale*, although his compositional techniques are rooted much further back into the history. At the same time, his aesthetics and artistic philosophy are dispersed through different ideals rooted within as well as out of Western musical heritage, but revealing hardly any salient intertextual features – features that would reveal semantically more tangibly loaded analogies – except some acoustical archetypes. And it is, I believe, exactly a kind of search for semantic universals, as indicated by Rojko's *Sinfonia concertante*, that enables "earthing" of the compositional flow not in a specific compositional theory or system, but in a process of a constant hearkening to different compositional techniques, that deserve to be epitomized as classical, and calibrating them according to the idiosyncratic ear in which, as it seems in the case of Uroš Rojko, not specific semantic fields, but a specificity of the acoustical events have the major role.

With shifting the analytical focus from issues of compositional theory and the history of ideas toward the field of cognitive analysis, Rojko's work seems to raise an important question of different contemporary compositional practices. The contemporaneity, as illustrated by the work of Uroš Rojko, is not centred around the relation between the old and the new, but around the relation between the new compositional techniques and the aesthetic qualities that are likely to be defined as classical, valuable in their transcending potency regardless of their specific historical provenance, leading the argument, of course, beyond the field of composition and "purely musical" values discussed in this paper.

Notes

[1] The score is fully entitled *Sinfonia concertante* for flute (also piccolo and alto flute), oboe (also oboe d'amore and English horn), piano and orchestra. The following excerpts are quoted from the score of Ricordi, Milano, No. 136498. According to Rojko's personal comment to me, this piece does not represent his symphonic music at its best (allegedly because of the "unsuitable" compositional solution of the second movement and of the improper performance) and is not included in the last CD with Rojko's symphonic music (Edition of the Society of Slovenian Composers ED.DSS 200027). Yet, in spite of his opinion, this work embodies his musical logic in a somewhat simplified but nonetheless representative manner.

[2] Rojko's comment on *Sinfonia concertante* for the first performance of the work on 28. 3. 1994 in Ljubljana, in the concert booklet of the Symphonic Orchestra of Radio-television Slovenia.

[3] Rudolf Schäfke, *Geschichte der Musikästhetik in Umrissen*, Tutzing: Hans Schneider Verlag$_2$ 1964, 371ff.

[4] For instance, the Charles Eliot Norton Lectures of Joseph Kerman, *Concerto Conversations* (Cambridge, Massachusetts, London, England: Harvard University Press, 1999) are an inspired analysis of the concert genre in terms of "musical physicalities" (19) – Adornesque universals in music ("Setzung, Fortsetzung, Kontrast, Auflösung, Reihung, Entwicklung, Wiederkehr"; T.W. Adorno, On the Problem of Musical Analysis, in: *Music Analysis*, Vol. 1, No. 2, July 1982, 185) that form a kind of "integrative aesthetics" in which "Einheit von semantischen, pragmatischen, aber auch syntaktischen Aspekten" must be analysed (Peter Faltin, *Bedeutung Ästhetischer Zeichen. Musik und Sprache*, in: ASSK Band 1 [Ed. Christa Nauck-Börner], Rader Verlag, Aachen 1985, 44).

[5] Pogovor s Srečkom Mehom [Interview with Srečko Meh], in: Glasbena mladina 1995/5, 6.

[6] Brošura Radia Slovenije [Booklet of Radio Slovenia]: Prix Italia '93, *Uroš Rojko Inner Voices*.

[7] Pogovor s Srečkom Mehom [Interview with Srečko Meh], in: Glasbena mladina 1995/5, 6.

[8] Pogovor s Srečkom Mehom [Interview with Srečko Meh], in: Glasbena mladina 1995/5, 6.

[9] Originally the fragment reads: " ... ma in genere possiamo dire che probabilmente viviamo in una era postmodernistica. Significa che in certi momenti non era necessario, obbligatorio o desiderato produrre musica con processi intellettuali. Così si è vissuto il periodo che diede ai compositori una vera libertà: si poteva produrre liberamente e questo ebbe effetti positivi e negativi. Dipendeva tutto dal compositore. Principalmente, la corrente del postmodernismo ando nella direzione di un acritico modo di produrre, senza schemi o probabilmente al di fuori di essi. Credo che in questi ultimi anni, la situazione stia cambiando progressivamente. Diciamo che il postmoderno ha avuto così tanti problemi a imporsi che l'interesse per la sperimentazione e il modo di pensare intellettuale stanno di nuovo tornando in evidenza. E' un ciclo, perché ora non è pił interessante e si ritorna all'intellettualismo nella musica, (il post-modernismo era contro l'intellettualismo). Ma ora è l'intellettualismo a essere contro il post-moderno, e naturalmente non è più allo stesso livello di prima. Penso che questo sia un buon segno, perché porta con sé anche la necessità di interessarsi a certe cose speciali, a cose più sofisticate che non siano necessariamente populiste, popolari o comprensibili nei loro sviluppi. C'è di nuovo la possibilità per l'arte di potersi sviluppare ancora nella maniera del principio, quello che si dice 'basso principio artistico'". (Gianfranco Terzoli, Uros Rojko, un musicista creativo' in: *Fucine*, April 2001, http://www.fucine.com/network/fucinemute/core/index.php?url=redir.php?articleid)

[10] Originally the quotes read: "Ein System sagt noch gar nichts aus, was du daraus machst ist wichtig." "Die Idee, etwas Neues zu machen, war damals, als ich mit Serialismus und Neuer Musik beschäftigte, sehr wichtig [...] Es geht mir in der Tat um Schönheit, aber diese Schönheit hat eine Tiefe, hat einen Grund. Dieser Grund liegt nicht in unserer Welt, ist etwas, was unsere Welt nicht bieten kann und was ihr dennoch zugrundeliegt. Natürlich möchte ich meine Musik nicht zu einem Punkt von New Age oder änlichem bringen, wo es nur darum geht, therapeutisch einen Zustand zu bekommen [...]. Meine Musik hat keine therapeutische Absicht, sie grenzt schon eher an ein natürliches Erlebnis, so daß man sich als Mensch wohlfühlt. [...] Mein Leben ist so gekommen, daß ich für mich eine andere Welt suche. Die Musik drückt das aus und ist ein Teil von mir. "(*Lauschen auf die innere Musik. Wolfgang Rüdiger im Gespräch mit Uroš Rojko*, in the foreword to the CD ARS MUSICI [AM] 1122-2, Freiburger Musik Forum 1995, 15, 18–19.)

[11] Uroš Rojko, Prehodnost zdajšnjega trenutka [Transience of the present moment], in: *Nova revija* XX/225/226/227, Ljubljana 2001, 441.

[12] Brošura Radia Slovenije [Booklet of Radio Slovenia]: Prix Italia '93, *Uroš Rojko Inner Voices*.

[13] Brošura Radia Slovenije [Booklet of Radio Slovenia]: Prix Italia '93, *Uroš Rojko Inner Voices*.

[14] Cf. Walter Wiora, Absolute Musik, in: *Musik in Geschichte und Gegenwart*, Band 1, Kassel und Basel: Bärenreiter 1949–1951, 46–56; Carl Dahlhaus, *Die Idee der absoluten Musik,* Kassel: Bärenreiter 1979 (English translation

by Roger Lustig: Carl Dahlhaus, *The Idea of Absolute Music*, Chicago and London: The University of Chicago Press 1989); Albrecht von Massow, 'Absolute Musik', in: Hans Heinrich Eggebrecht (ed.), *Terminologie der Musik im 20. Jahrhundert. Handwörterbuch der musikalischen Terminologie*, Stuttgart: Franz Steiner Verlag 1995, 1–17. Adolf Nowak, *Musikalische Logik*, in: Albrecht Riethmüller, Markus Bandur (eds.), *Handwörterbuch der musikalischen Terminologie*, 38. Auslieferung, Winter 2004–5, Stuttgart: Franz Steiner Verlag, 2004.

[15] Originally the whole sentence reads: "Absolute Musik hingegen ist lediglich eine Negativbestimmung, die bei darüber hinausgehenden Verwendungen als Reflexionsbegriff nur auf idealistischer Ebene ihre Gültigkeit hat, da eine dem genauen Sinn des Wortes absolut entsprechende empirische Tatsache nicht nachweisbar ist." Albrecht von Massow, Absolute Musik, in: Hans Heinrich Eggebrecht (ed.), *Terminologie der Musik im 20. Jahrhundert. Handwörterbuch der musikalischen Terminologie*, Stuttgart: Franz Steiner Verlag, 1995, 17.

[16] Albrecht von Massow, Absolute Musik, in: Hans Heinrich Eggebrecht (ed.), *Terminologie der Musik im 20. Jahrhundert. Handwörterbuch der musikalischen Terminologie*, Stuttgart: Franz Steiner Verlag, 1995, 1.

[17] "Entscheidend ist nämlich nicht, daß die Musik metaphysisch verstanden wurde, sondern wie sie metaphysisch verstanden wurde." Ulrich Tadday, *Das schöne Unendliche. Ästhetik, Kritik, Geschichte der romantischen Musikanschauung*, Stutgart, Weimar: Verlag J. B. Metzler, 1999, 213.

[18] Cf.: Charles Wilson, György Ligeti and the Rhetoric of Autonomy, in: *Twentieth-Century Music* 1/1, Cambridge University Press, 5–28; and: Albrecht von Massow, Autonome Musik [Autonomous music], in: Hans Heinrich Eggebrecht (ed.), *Terminologie der Musik im 20. Jahrhundert. Handwörterbuch der musikalischen Terminologie*, Stuttgart: Franz Steiner Verlag, 1995, 77–87. Leonard B. Meyer, *Emotion and Meaning in Music.* Chicago: Chicago University Press, 1956.

[19] Christopher Fox, New Complexity, *Grove Music Online* ed. L. Macy (3.9.2003), <http://www.grovemusic.com>

[20] It would be questionable to claim that the existent "epistemological variety" in discussing postmodern music brings new views (though it certainly does differentiate many old stances). As the controversies of the so-called New Musicology – in which the critical autonomy of the analyst has been a kind of prime mover of the epistemologically differentiated and diversified analyses of the musical text, have been appeared – one has not many arguments left against the thought about "our continuing wavering between two modes of listening" (Bujić 1997: 22. Bujić's distinction refers to "two levels of musical understanding": of listening to music as to a sonorous structure on the one hand and, and of listening to "telling details" and "assigning value to" them (Bujić 1997: 19) on the other — to comprehending music intuitively or/and analytically (Lerdahl 2000: 255). In different vocabulary, the same "double-sided" recognition of the musical flow is thoroughly elaborated independently by H. H. Eggebrecht as a difference between "aesthetical" (ästhetisches) and "recognisable" (erkennendes) Verstehen and by N. Cook as musical and musicological listening. Both, Eggebrecht and Cook (Eggebrecht 1995; Cook 1992: 152ff), have doubts about the possibilities of a sharp separation between the "contextualizing", and "structural-formalistic" interpretation of the musical flow: between cognitive and connotative understanding (Hübner 1994: 26–38), or, as L.B. Meyer's notorious opposition from 1956 reads, between "referentialist/expressionist" and "absolutist/formalist" modes of interpretation. Eggebrecht and Cook have only emphasized the two main modes of listening to music that seem to be widely accepted since the L.B. Meyer's formulation of the then at least a century old aesthetical topic.
Bojan Bujić, Delicate metaphors, The Musical Times, June 1997, 16–22. Fred Lerfahl, 'Cognitive constraints on compositional systems', in: John A. Sloboda (ed.), Generative processes in music, Oxford: Clarendon Press, 2000 (second edition), 231–259. Hans Heinrich Eggebrecht, *Musik verstehen* [Understanding music], München-Zürich: Piper Verlag, 1995. (Cf. also: Hans Heinrich Eggebrecht, Musikalisches und musiktheoretisches Denken [Musical and musico-historical thinking], in: Frieder Zaminer [ed.], *Ideen zu einer Geschichte der Musiktheorie*, Geschichte der Musiktheorie, Band 1, Darmstadt: Wissenschaftliche Buchgesellschaft 1985, 40–58.) Nicholas Cook, Music, *Imagination & Culture*, Oxford: Oxford University Press, 1992. Kurt Hübner, *Die zweite Schöpfung. Das Wirkliche in Kunst und Musik*, München: C. H. Beck, 1994.

[21] Fred Lerdahl, 'Théorie générative de la musique et composition musicale', in: T. Machover (rd.) *Quoi? Quand? Comment?: la recherche musicale*, Paris: Christian Bourgois.

[22] An amusing event seems to indicate this point rather nicely. Uroš Rojko was somewhat puzzled and honoured at the same time when, after giving a long lecture on his music, a listener from the audience thanked him for composing "so simple music". Uroš Rojko, *Music and Religion*, a lecture delivered in Cankarjev dom, Ljubljana, Slovenia, on April 18, 2001.

Santrauka

Absoliuto idėja kaip procesualumo idėja: Uroš Rojko atvejis

Šio pranešimo tikslas – pasvarstyti epistemologinį klausimą apie muzikinės poetikos ir estetikos tariamą nesuderinamumą su siekiais, atitinkančiais „absoliučiosios muzikos“ sąvoką. Kaip pavyzdys, iliustruojantis absoliuto idėją, jame nagrinėjama vieno žymiausių Slovėnijos kompozitorių Uroš Rojko (1954) kūryba, kurioje vyrauja instrumentinė muzika.

U. Rojko studijavo klarneto specialybę (iki 1975 m. pas F. Treaną) ir kompoziciją (iki 1981 m. pas U. Kreką) Liublijanos muzikos akademijoje, vėliau tęsė kompozicijos studijas pas K. Huberį (1983–1986) ir G. Ligeti (1986–1989). Nors kompozitorius ir buvo susijęs su muzikos avangardu, jo muzikinė poetika ir estetiniai siekiai vargu ar galėtų būti pavadinti avangardiniais. Jo kūryba visiškai prieštarauja šio meno futuristiškumui ir elitiškumui. Vis dėlto jo meninių siekių jokiu būdu nederėtų gretinti nei su įvairių Naujojo amžiaus krypčių paprastumu, nei priskirti polistilistinei muzikinei poetikai, kuri paprastai vadinama postmoderniąja.

Rojko meninius siekius galima būtų pavadinti „didžiausio fiziologinio stimulo“ sąvoka – be jokio „išorinio“ semantinio potencialo. Šie kompozitoriaus siekiai pranešime iliustruojami vienu jo kūriniu („Sinfonia concertante“, 1993) ir toliau aptariami paties kompozitoriaus sau keliamų analitinių reikalavimų ir epistemologinių galimybių išgirsti jo muziką kaip jo kūrybinio proceso „imitaciją“ kontekste.

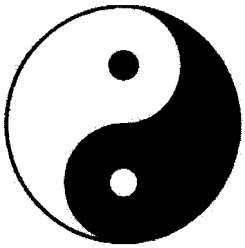
Pagrindinis pranešimo teiginys yra tas, kad gana svarbi (ir greičiausiai ne tik slovėnų muzikoje) šiuolaikiškumo sudedamoji dalis, kaip matyti iš U. Rojko kūrybos bei jo „taurios“, „grynos“, „absoliučios“ muzikos idėjos, yra kažkas tarp kompozicinės technikos universalumo ir estetinio perteikimo iš tam tikrų epistemologinių pozicijų.

Susan K. de Ghize

Yin and *Yang* à la Schoenberg: Balance in Brahms's Rhythmically Developing Variations

In ancient Chinese understanding, the *yin-yang* symbol represents the essence of life (Figure 1). The outer circle represents the universe, while the black (*yin*) and white (*yang*) shapes within the circle symbolize energy. The shapes of *yin* (rest, darkness, cold and femininity) and *yang* (activity, light, heat and masculinity) illustrate the constant movement of these two energies. As shown in the illustration, *Yin* is not all black and *yang* is not all white; that is, within the negative energy lies positive, and vice versa. Because *yin* and *yang* are opposing types of energy that cause everything to happen due to their differences – upward becomes downward, hot changes to cold, contractions expand – they are better thought of as complements to one another. The theory of *yin* and *yang* implies that everything is interrelated and "no part has a life of its own but is shaped by and helps to shape other constituent parts in a continuum of interactions."[1] To state it simply, *yin* and *yang* represent the opposing forces necessary to create motion and balance in life.[2]

Figure 1. *Yin-yang* symbol



Balance is essential in all facets of life and music is no exception. From the required resolution of a seventh chord, to the descending line after an *Anstieg*, tension constantly mounts and resolves in music. In addition to the aforementioned melodic and harmonic phenomena, there may also be rhythmic tension and resolution. In Arnold Schoenberg's article, "New Music, Outmoded Music, Style and Idea," he describes the importance of creating a balance by use of rhythm:

> *Every tone which is added to a beginning tone makes the meaning of that tone doubtful... In this manner there is produced a state of unrest, of imbalance which grows throughout most of the piece, and is enforced further by similar functions of the rhythm. The method by which balance is restored seems to me the real* idea *of the composition.*[3]

Schoenberg explains that *rhythmic* means perpetuate a state of unrest. Although much has been published about Schoenberg's writings (in particular, his concept of developing variations), it is interesting to note that writers often neglect the rhythmic aspect in comparison to pitch-based analysis.[4]

Several theorists, including Jack Boss and David Epstein, describe how pitch is the most significant feature in Schoenberg's music. Boss explains Schoenberg's system of developing variation as a common process that contributes to organizing the *interval* structures in both the tonal and atonal music of Schoenberg. Boss disregards rhythm altogether in his definition of Schoenberg's process, yet also claims the system is often analyzed inadequately.[5] Epstein also comments on the emphasis Schoenberg places on pitch: "Even in the early twelve-tone literature of Schoenberg and others, rhythm, for one, received less discussion than pitch properties of the set or the operational implications of pitch."[6] These shortcomings can be found not only in analyses of Schoenberg's works, but to earlier tonal works as well. To Carl Dahlhaus, the reason for the emphasis on pitch when analyzing developing variations is obvious:

> *Musical logic, the 'developing variation' of musical ideas (as it was called by Schönberg, who admired Brahms and belittled Bruckner), rested on a premise considered so self-evident as to be beneath mention: that the central parameter of art music is 'diastematic,' or pitch, structure.*[7]

Regardless of Schoenberg's contradictory direct reference stating the importance of rhythm, Dahlhaus clearly argues that pitch determines art music. This deficient one-sided analysis is most obviously portrayed by the analyses of works by Johannes Brahms, who is known for his use of developing variations.

Despite the amount of literature written about both Brahms's use of rhythm *and* Brahms's use of developing variations, very little has been discussed about Brahms's use of rhythmically developing

variations. Walter Frisch, whose book *Brahms and the Principle of Developing Variation* has been described as representing "the first systematic attempt to apply Schoenberg's notion of developing variation to the analysis of Brahms's music," hardly touches upon rhythm.[8] While thoroughly analyzing many of Brahms's works, Frisch neglects to place nearly as much emphasis on rhythmic transformations.

A limited number of writers, including Schoenberg himself, do emphasize the importance of rhythm in developing variations. In *Fundamentals of Musical Composition*, Schoenberg lists six types of rhythmic variations, including the modification of note lengths, repetitions, rhythm shifts, the addition of upbeats, and even the changing of the meter.[9] He also makes several other direct statements placing emphasis on the significance of rhythm in developing motives.[10]

Why is rhythm still neglected and how can we base an analysis on rhythm?[11] Perhaps a rhythmic analysis has been avoided because rhythm is integral, meaning that it depends on everything else that occurs (including melody and harmony). Indeed, it is often difficult to separate rhythm and pitch. However, just as theorists in the past have focused their analyses on pitch, one can also create an analysis on rhythm alone. Several scholars have found this segregation useful in their analyses. Maury Yeston asserts that when describing rhythmic and pitch analyses, "keeping the two analytical approaches separate assures that the importance of a rhythmic moment will not both determine and be determined by the significance of a coinciding pitch event."[12] Once we identify rhythmic transformations, we can discover rhythms that gradually change, just as we distinguish intervals that continually develop.

To help identify rhythmically developing variations, I will describe several rhythmic techniques and exemplify them in chamber works of Johannes Brahms (op. 34, op. 25, op. 101, and op. 51 no. 1). As mentioned earlier, Brahms is notorious for his use of rhythm, motives, and developing variation.[13] The final step will be to show, as Schoenberg described, how rhythmic changes create an imbalance and how restoring this balance becomes the real idea of the composition. In order to do so, I will show how some *yin*-procedures eliminate parts while other *yang*-techniques attach elements to restore the balance that Schoenberg found necessary.[14]

Yin: Elimination

Yin represents woman, cold, dark, passive, weak, downward, and contracting.

Elimination is a general term for a compositional technique in which parts of the motive gradually disappear; parts are eliminated and the motive is compressed.[15] Elimination may be applied to any part of the motive and it may occur at any point. One definitive characteristic of elimination is repetition, because motives that undergo elimination are often too short and vague to be played only once.

There are two specific types of elimination, the first of which Schoenberg calls liquidation. Liquidation is when elimination is applied to a motive so that it completes the phrase, or brings the phrase to a cadence.[16] In *Fundamentals of Musical Composition*, Schoenberg explains:

> *Liquidation consists in gradually eliminating characteristic features, until only uncharacteristic ones remain, which no longer demand a continuation. Often only residues remain, which have little in common with the basic motive.*[17]

Because liquidation "no longer demands continuation," it is often used to conclude a phrase.

One can find liquidation in the first movement of Brahms's op. 34 Piano Quintet.[18] The movement opens with idea *Y*, which is shown in Example 2. It consists of three distinct ideas:

Example 2. Op. 34/i, mm. 1–4.

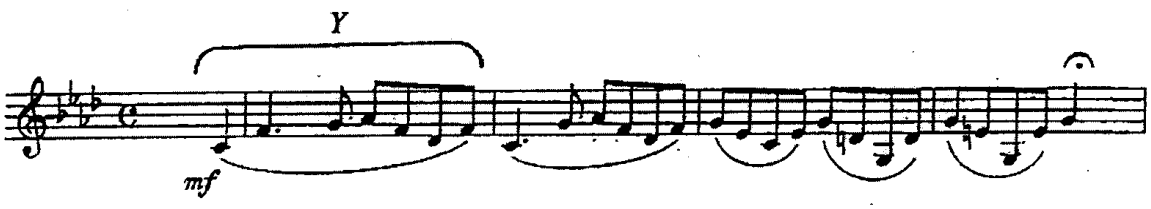
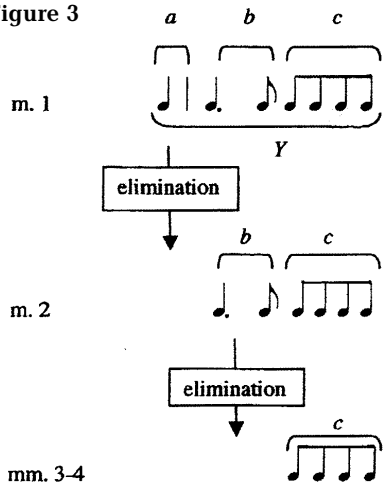


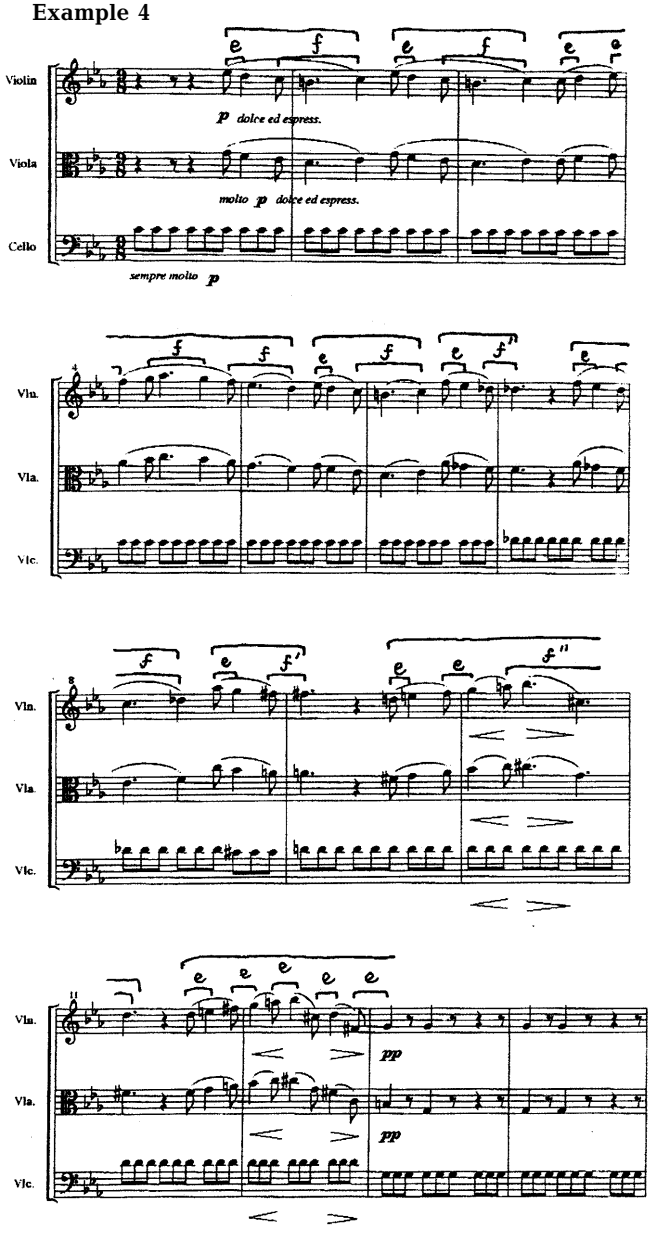
Figure 3



a pick-up note (*a*), a dotted quarter note followed by an eighth note (*b*), and four eighth notes (*c*). The theme immediately undergoes elimination in measure 2, where there is no longer a pick-up note, and continues in measures 3 and 4, where motive *b* dissipates (Figure 3). As a result, only the last four eighth notes remain. This is the most typical use of liquidation, where only the last part of the motive prevails and concludes the phrase. These measures do not define liquidation in the traditional classical sense, in which a 2-bar phrase first appears in tonic, then in dominant, and then reduces.[19] Rather, this is an example of liquidation, in the sense that the music "gradually eliminates characteristic features, until only uncharacteristic ones remain, which no longer demand a continuation."

In the Piano Quintet, the end of the main idea remained after liquidation. However, as already mentioned, this is not always the case. Sometimes the beginning of the motive is retained, while the end of the motive is eliminated. In the second movement of Brahms's First Piano Quartet, op. 25, Brahms uses elimination to first create variety and then liquidation to conclude a phrase, but keeps the first part of the motive to do so (Example 4).

Example 4



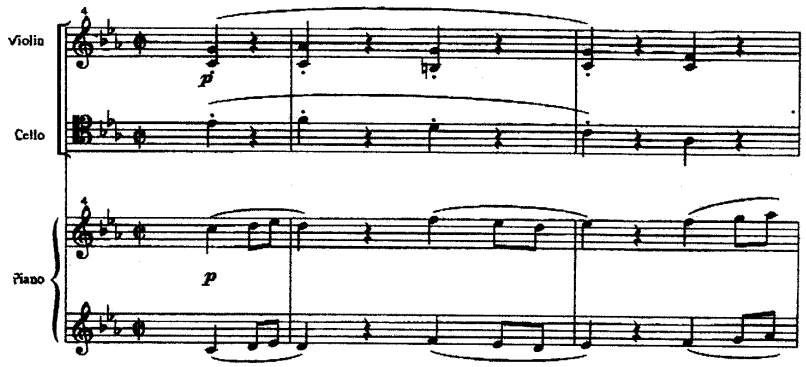
The *Grundgestalt*, or main idea, of this movement embraces two component motives, *e* and *f*. The first alteration appears in measures 3–4, where both motives *e* and *f* repeat. The next change occurs at measure 7, where the quarter note of motive *f* disappears. By eliminating the last note of motive *f*, it balances the previous repetitions of motives *e* and *f* in bars 3–4. At bar 10, the last quarter note of motive *f* transforms into two dotted quarters. This time motive *f* expands, rather than shortens. As the music approaches the cadence, more changes occur. In measures 11–12, motive *f* dissolves entirely as motive *e* repeats. Although the phrasing indicates that the quarter notes are slurred to the eighths, one can convincingly hear bars 11–12 as a series of pick-up notes followed by downbeats (i.e. repetitions of motive *e*). Again, Brahms balances the expansion of motive *f* in bars 10–11 by omitting motive *f* in measures 11–13 to end the section. Brahms uses liquidation, as he eliminates part of the motive to approach the cadence and conclude the phrase. In this example, the latter half of the theme vanishes and the first part is the "melodic residue," which is a term Schoenberg used for what was left after liquidation.[20]

Another specific type of elimination is what Heinrich Schenker called *Knüpftechnik*, which is when the end of a phrase is eliminated and begins the next. Literally translated as "tieing" or "knotting" technique, *Knüpftechnik* is a type of elision.[21]

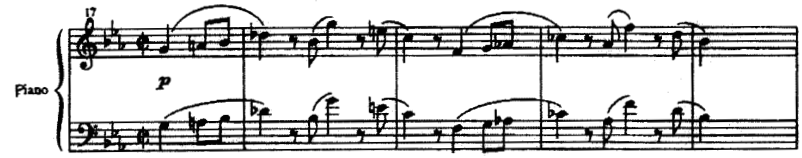
Brahms has been known for his use of *Knüpftechnik*, as Walter Frisch describes: "This technique, by which a 'new' idea evolves spontaneously from a preceding one, is a distinctly Brahmsian one."[22] Both *Knüpftechnik* and liquidation are types of elimination; however, *Knüpftechnik* is a type of integration and liquidation is a type of disintegration. In contrast to liquidation, which does not require continuation, *Knüpftechnik* spawns and immediately continues the new idea. Schoenberg's term for *Knüpftechnik* is "transition"; in his article "Connection of Musical Ideas," he writes: "A liquidation can, at one point or another, cease to eliminate (characteristic features); instead it can begin to develop and add new features. It then will have changed into a *transition*."[23]

In the second movement of the op. 101 Piano Trio, Brahms uses elimination in both the forms of liquidation and *Knüpftechnik* (Example 5). The melody encompasses motives consisting of a quarter note, followed by two eighths and another quarter. In Example 6, each phrase from bars 17–26 closes by use of elimination – more specifically, liquidation. The first two notes of the opening motive disappear, as only the last two notes conclude each phrase. At measure 43, the strings begin a new melody based on the recently-formed two-note motive (Example 7). Although the second theme does not literally elide with the previous theme, this is still a type of *Knüpftechnik*, since the end of the original motive becomes the basis of an entirely new theme. To summarize, Brahms preserves two notes from the original motive to be used at cadences as liquidation and to be the basis of a new melody as *Knüpftechnik* (Figure 8).

Example 5

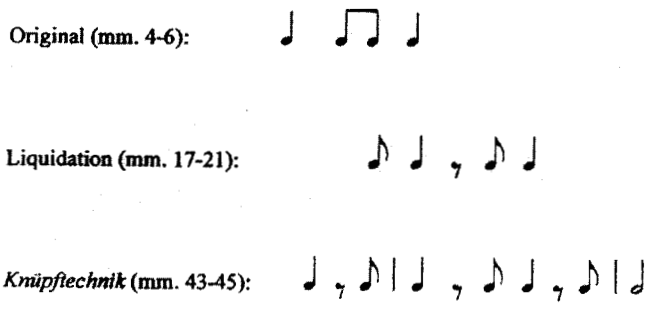


Example 6



Example 7

Figure 8



***Yang:* Attachment**

Yang represents man, heat, bright, active, strong, upward and expanding.

As already mentioned, *Knüpftechnik* is self-balancing; although parts are eliminated, they immediately rejuvenate as new themes. However, to balance other types of elimination, such as liquidation, one may use an extending procedure called attachment, which is the addition of notes.[24] In fact, Schoenberg describes how attachment and balance work together: "Development implies not only growth, augmentation, extension, and expansion, but also reduction, condensation, and intensification. The purpose of liquidation is to counteract the tendency toward unlimited extension."[25] In the Book of *Lao Tzi*, who was the chief leader of the Taoist school, it states that reversal is the movement of the *Tao* (or, the Way). Similarly, attachment is the reversal of elimination. The basic motive remains intact, but with notes added before (prependage), in between (interpolation), or after (appendage). These attachments may be any type of note: passing, neighbouring, repeating, arpeggiated, etc.

One can find instances of attachments in the String Quartet, op. 51 no. 1 (Example 9). The motive of a dotted quarter note followed by an eighth is the basic idea of the first movement and repeats to create phrases. The first phrase opens with the two-note motive repeated three times and closes with an appendage. The appendage is a magnification of the opening motive. By adding the magnified motive, the half note allows the music to slow down and complete the phrase. The second phrase also contains an attachment. However, this time it is an example of prependage, as the added note is the pick-up to the second phrase. As mentioned earlier, Schoenberg describes that a rhythm can be changed "by addition of upbeats," or as I call it, by prependage.[26] Interestingly, the prependage itself also derives from the original motive, but with the first note eliminated. The use of the prependage here is particularly effective, as it drives the music forward, after the newly added magnified appendage decelerated the motion of the previous phrase (Figure 10).

Example 9

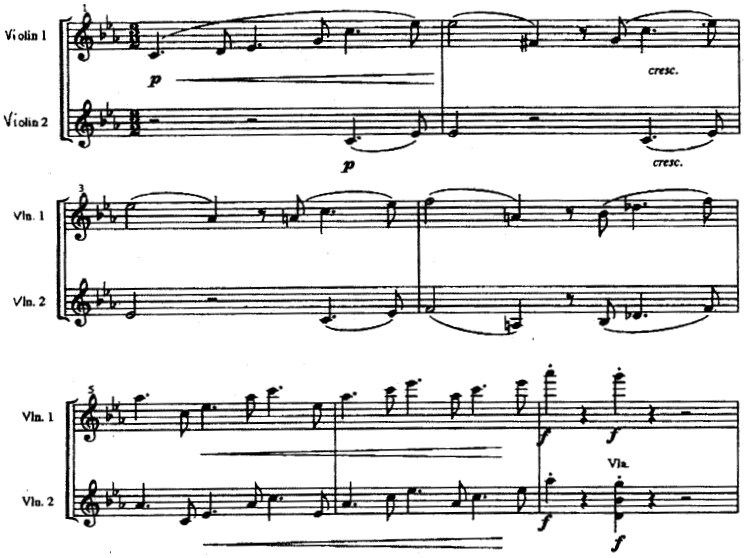
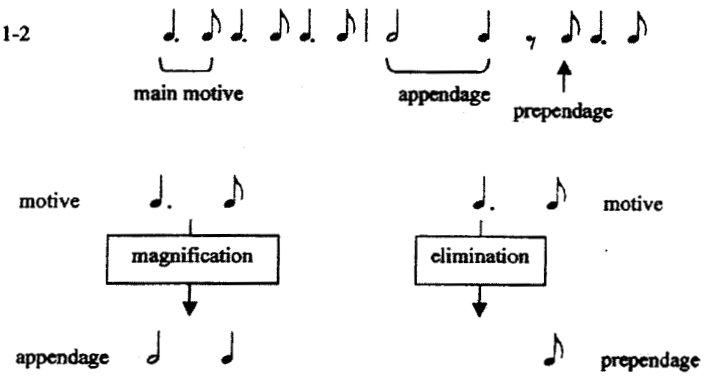


Figure 10



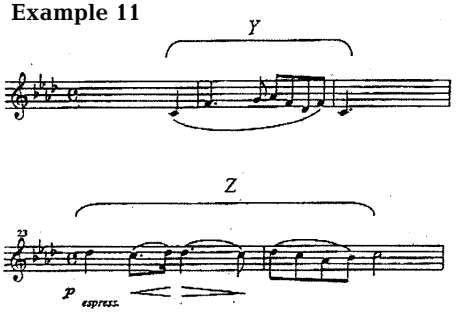
Yin and *Yang* = Balance

In the basic medical text of traditional China, known as the Yellow Emperor's Classic of Medicine (3 B.C.), the fundamentals of yin and yang are explained: "To determine whether yin or yang predominates, one must be able to distinguish a light pulse of low tension from a hard, pounding one. With a disease of yang, yin predominates. With a disease of yin, yang predominates. When one is filled with vigor and strength, yin and yang are in proper harmony."[27]

Now that the *yin* quality of elimination and the *yang* quality of attachment have been defined and described, one can apply these techniques to the formation of imbalance and the restoration of balance.[28] In the First String Quartet (Example 9), we found several examples of attachment. However, on a higher level, elimination is the technique applied in the first seven bars. The first phrase is five beats long, the next two phrases three beats each. This is due to the elimination of the first three notes. The fourth phrase, which is subsequently an eliminated variation of the second and third phrases, drives to a cadence. Since parts of the original theme are gradually eliminated until the cadence, this is a type of liquidation.[29] Because the piece begins with the two-note motive, elimination is only made possible by Brahms's recent employment of appendages and prependages. In other words, the purpose of liquidation here is to counteract the tendency toward unlimited extension. As stated in the introduction, *yin* is not all *yin*, and *yang* is not all *yang*. Illustrated by the small circles within the *yin-yang* symbol, there are *yin* characteristics in *yang*, and vice versa. Similarly, the First String Quartet is only one example, where both *yin* and *yang* qualities coexist.

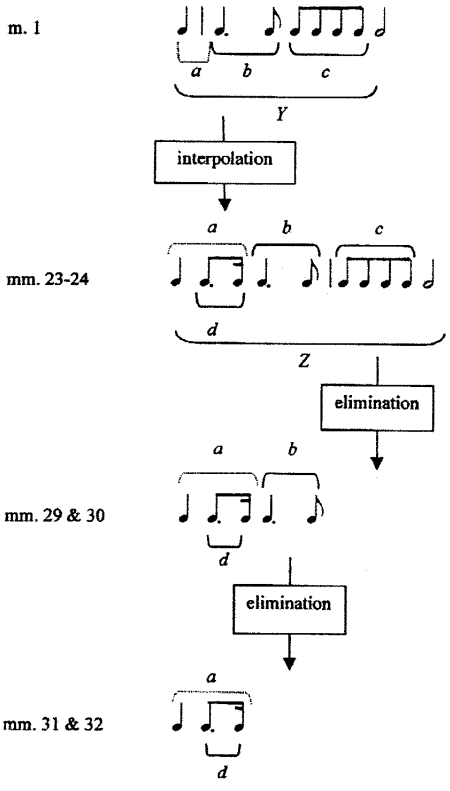
In the development, the original motive gains another appendage, but with a different purpose (Example 11). Unlike the exposition, the purpose of this attachment is not to counteract the removal of ideas. Rather, this appendage changes the essence of the motive. Originally, a chain of two-note motivic particles, or dyads, created a phrase. With this new appendage, the three-note motive becomes self-sufficient. Here, the attachment does not close a phrase; rather it creates a new motive. In the exposition, Brahms was able to put the potentially unlimited spreading of the original motive under control by use of liquidation. As a reward, he creates a new motive by expanding on the original motive in the development.[30]

Example 11

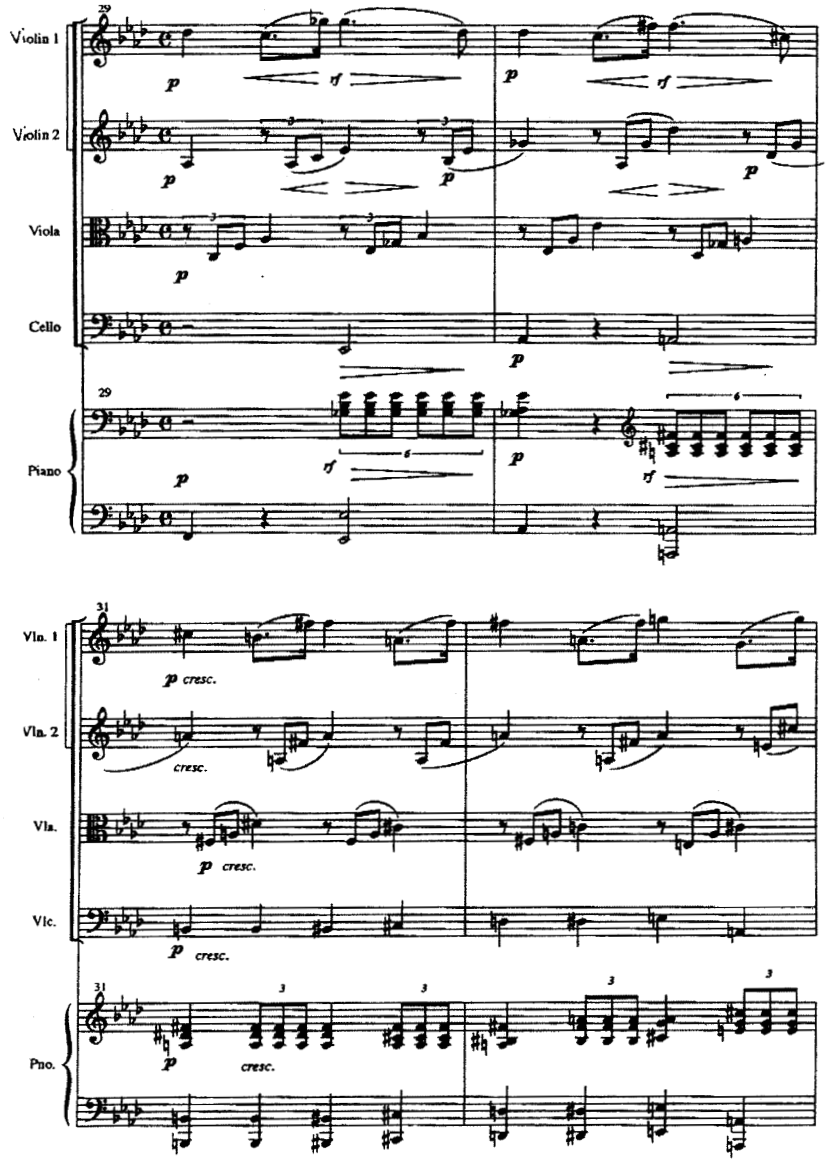


Brahms ingeniously employs and varies elimination and attachment in his Piano Quintet. As already discussed, one finds liquidation in the opening. Brahms balances the elimination in the first theme by using attachment in the second theme (Figure 12). The second theme, labeled Theme *Z*, begins at measure 23. Although it differs from theme *Y* melodically, it is similar rhythmically. In Figure 13, one can see that the only difference between themes *Y* and *Z* is the attachment of motive *d*, which is an example of interpolation. It is interesting to note that motive *d* is a fractionalized variation of motive *b*. Fractionalization is the opposite of magnification – it is simply the lessening of durations. As a result of the interpolation, metric relocation shifts the theme. Theme *Y* began with a pick-up note; theme *Z* begins on the downbeat. The metric relocation conceals the similarities between the two themes.

Figure 12



Example 13



As expected, we soon reencounter elimination. Before the key changes to C-sharp minor, Brahms closes the section by applying elimination, starting at measure 29. First, motive *c* disappears. Previously, motive *c* remained and repeated to conclude the phrase by use of liquidation. This time, it is the first to be eliminated. At measure 31, motive *b* vanishes and only the first three notes of theme *Z* remain. Brahms utilizes the techniques of elimination and attachments in this movement to create a balance. In the beginning, he eliminates everything but keeps motive *c*, and repeats it in the form of liquidation. The second theme is built from the first theme, but with an attachment of motive *d*. To develop the second theme, Brahms immediately eliminates motive *c*, and retains motive *d*, which he uses in the form of liquidation.[31]

The *Tao:* Conclusion

> *The successive movement of yin and yang constitutes what is called the Way (Tao). What issues from it is good, and that which brings it to completion is the individual nature.*[32]

Schoenberg writes that liquidation "counteract[s] the tendency toward unlimited extension." Indeed, the first movement of the Piano Quintet is only one example that is filled with ebb and flow, of giving and taking, of *yin* and *yang*; parts are eliminated, then attached, then eliminated, creating the balance Schoenberg found necessary. In other compositions, Brahms applies *Knüpftechnik*, where the balance is self-sustaining; parts are eliminated, yet what remains immediately

produces a newly developed idea. Chinese phiolosophy is more concerned with relationships than with substance. Similarly, Pieter van den Toorn notes that the motive itself is not as important as the development of the motive:

> *More often than not, it is by way of their successive appearances, by way, more precisely, of the connective thread that is woven as a result of those appearances, that motives shape and become memorable. They are identified by the specific manner of their developing variation, in other words; in reciprocal fashion, they both define and are defined by development, gradually build and are built by it.*[33]

Yin and *yang* are simply names; it is how these forces react to and complement one another that give them meaning.[34] In the chamber works of Brahms, we find "proper harmony" (no pun intended). Neither *yin* nor *yang* dominates; rather, *yin* and *yang* together create unrest and restore a balance that becomes the real idea of the composition.[35]

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Notes

[1] *Chinese Civilization and Society: A Sourcebook,* ed. by Patricia Buckley Ebrey and trans. by Mark Coyle (NY: The Free Press, 1981), 36.

[2] The interaction of *yin* and *yang* differs from most traditional Western views of duality. Whereas Western beliefs often focus on the antagonism between the two ideas (i.e. good versus evil), *yin* and *yang* emphasizes the mutual harmony between the two opposing forces. Also, unlike Hegel's idea of thesis, antithesis, and synthesis, there is no hierarchy, or *Aufhebung*, in this view. *Yin* and *yang* are both equally important and necessary for life to exist, not to create a third, higher result.

[3] Arnold Schoenberg, "New Music, Outmoded Music, Style and Idea (1946)," in *Style and Idea: Selected Writings of Arnold Schoenberg*, ed. by Leonard Stein (Berkeley: University of California Press, 1989), 123.

[4] This is not to say that rhythm is neglected entirely. Most theorists touch upon rhythm; however it is not delved upon as deeply as a pitch-based analysis.

[5] One concept that Boss must be referring to is rhythm. See Jack Boss, "Schoenberg's Op. 22 Radio Talk and Developing Variation in Atonal Music," *Music Theory Spectrum* 14/2 (Fall 1992): 125.

[6] David Epstein, *Beyond Orpheus: Studies in Musical Structure* (Cambridge: MIT Press, 1979), 8.

[7] Carl Dahlhaus, *Nineteenth-Century Music*, translated by J. Bradford Robinson (Berkeley: University of California Press, 1989), 272. On the other hand, Dahlhaus described pitch as an "abstract" element that was dependent upon rhythm, 240: "...it has no real existence without a rhythm of some sort."

[8] V. Kofi Agawu, review of *Brahms and the Principle of Developing Variation*, by Walter Frisch, in *Music Analysis* 7:1 (1988): 99. Also, see Frisch, *Brahms and the Principle of Developing Variation* (Berkeley: University of California Press, 1984).

[9] In *Fundamentals of Musical Composition*, Schoenberg lists types of motivic variations, including how rhythm, intervals, harmony, and melody change. Schoenberg, *Fundamentals of Musical Composition*, ed. by Gerald Strang and Leonard Stein (New York: St. Martin's Press, 1967), 10.

[10] In his essay, "Composition with Twelve Tones," Schoenberg writes, "A musical idea, accordingly, though consisting of melody, rhythm, and harmony, is neither one nor the other alone, but all three together." Schoenberg, "Composition with Twelve Tones (I) (1941)," in *Style and Idea*, 220.

[11] Paul Fraisse claims that rhythm is so complex, there is not even an accepted definition of it: "The task of those who study rhythm is a difficult one, because a precise, generally accepted definition of rhythm does not exist. This difficulty derives from the fact that rhythm refers to a complex reality in which several variables are fused." Paul Fraisse, "Rhythm and Tempo," *The Psychology of Music*, ed. Diane Deutsch (New York: Academic Press, 1982), 149.

[12] Maury Yeston, *The Stratification of Musical Rhythm* (New Haven: Yale University Press, 1976), 5.

[13] For an account on Brahms's use of rhythm, see Epstein, "Brahms and the Mechanics of Motion: The Composition of Performance," in *Brahms Studies: Analytical and Historical Perspectives*, ed. George S. Bozarth (Oxford: Clarendon Press, 1990), 192. "No musician can deal with the music of Brahms without encountering these ambiguities. In their most common form they involve a disparity between how the music is heard and the way it is embodied in score. Rhythmically strong points of phrases, for example, felt as downbeat articulations, are often notated in weak portions of bars." For more on Brahms and rhythm, see also Walter Frisch, "The Shifting Bar Line: Metrical Displacement in Brahms," in *Brahms Studies*, 139-163. To read more on Brahms's use of motives, see Jon W. Finson, review of *Brahms Studies: Analytical and Historical Perspectives*, ed. by George S. Bozarth and *Brahms and His World*, ed. by Walter Frisch, in *Journal of the Royal Musical Association* 117 (1992): 153. "The glory of Brahms's art (and a major part of its meaning) lies in motivic threads woven with the contrapuntal techniques he acquired from earlier masters into traditional tapestries of sumptuous density and elegance."

[14] Michael Cherlin writes an insightful paper, entitled "Dialectical Opposition in Schoenberg's Music and Thought," in which he describes the Greek philosopher Heraclitus, in *Music Theory Spectrum* 22/2 (Fall 2000): 157–176. Interestingly, the Chinese concept of *yin-yang* and Heraclitus's ideas of dialectical oppositions occurred at approximately the same time.

[15] Schoenberg's term for elimination is "rhythmic reduction," where a rhythmic pattern is divided, then one or more parts are repeated. Schoenberg, *Fundamentals*, 3.

[16] Boss describes how Schoenberg uses liquidation in sentence structure: "...Schoenberg's discussion in *Fundamentals* of sentence structure demonstrates how a certain kind of succession, liquidation, gives the continuation its unique character and enables the sentence to come to a cadence," 125.

[17] Schoenberg, *Fundamentals*, 58.

[18] Walter Frisch also writes about metrical-rhythmic development of the opening. See Frisch, *Brahms and the Principle of Developing Variation*, 93.

[19] The quintessential example of liquidation is the opening of Beethoven's First Piano Sonata, op. 2 no. 1.

[20] Schoenberg, *Fundamentals,* 63.

[21] Since an elision overlaps the start and end of phrases, the structural downbeat is concealed. Pieter van den Toorn writes that *Knüpftechnik* is "a motivic linkage in which, very often, an inconspicuous figure at the end of one phrase inaugurates the next." In describing the use of *Knüpftechnik* in Brahms's Third Symphony, he explains, "This is an elision, of course, a joining together of the ending and beginning of phrases, a point of structural

significance. But it is a developing variation as well, one of many along the progress of Theme II to the closing section." For more on Brahms's Third Symphony, see Pieter van den Toorn, "What's in a Motive? Schoenberg and Schenker Reconsidered," *The Journal of Musicology* XIV/3 (1996): 370–399.

[22] Frisch, *Brahms and the Principle of Developing Variation*, 15.

[23] Schoenberg, "Connection of Musical Ideas (1948)," in *Style and Idea*, 288.

[24] Schoenberg calls attached notes as *ancillary notes*. In *Fundamentals of Musical Composition,* he writes, "In order to avoid aesthetically misleading and corrupted terms, *ancillary* will be preferred to referring to the so-called 'embellishing' or 'ornamental' notes of conventional melodic formulas," 10.

[25] Schoenberg, *Fundamentals*, 58. Patricia Carpenter takes an analogous view to my paper in her article, "*Grundgestalt* as Tonal Function." The article focuses on the harmonic aspect of Schoenberg's concept of balance. She writes: "Schoenberg apparently saw organization by tonal hierarchy as an attempt to stave off an ultimate state of disintegration. The centripetal function of a progression is exerted by stripping the centrifugal tendencies, that is, tonality is established through the conquest of its contradictory elements." *Music Theory Spectrum* 5 (1983): 17.

[26] Schoenberg, *Fundamentals*, 10.

[27] *Chinese Civilization*, 36–37.

[28] In his article "Symmetry and Symmetrical Inversion in Turn-of-the-Century Theory and Practice," David W. Bernstein discusses Goethe's interest in polar relationships found in nature. See *Music Theory and the Exploration of the Past*, ed. Christopher Hatch and David W. Bernstein (Chicago: University of Chicago Press, 1993). Bernstein states "Goethe found polar relationships throughout a wide variety of natural phenomena. Polarities of light and dark played a critical role in his *Farbenlehre*. Similarly, the diastolic and systolic beating of the heart, the contraction and expansion of leaf forms, acidification and deacidification and magnetism, were for Goethe examples of duality of opposites present throughout nature," 379.

[29] Peter Smith and David Lewin also analyze this movement as containing examples of liquidation Smith writes, "Specifically, the end of the development, in each example to be discussed, exhibits what Schoenberg called the culmination of a process of liquidation: a fractured motivic character that in these sonata forms arises out of the rhythmic augmentation of melodic fragments from the first theme." "Liquidation, Augmentation, and Brahms's Recapitulatory Overlaps," *19th-Century Music* XVII/3 (Spring 1994): 238. David Lewin, "Brahms, His Past, and Modes of Music Theory," in *Brahms Studies: Analytical and Historical Perspectives*, ed. George S. Bozarth (Oxford: Clarendon Press, 1990), 13: "In bars 1 to 8 we recognize the gist of a rhetorical form which Schoenberg called a sentence: a motivic model is stated, progressively developed, and 'liquidated', leading to a cadence."

[30] Pieter van den Toorn describes this duo-interpretation as smallest common multiple and greatest common factor: "For while motives are fairly nondescript in and of themselves, while they can refer to processes which are hugely general, their realizations (the paths they lay) are highly individual, indeed, reflective of the most intimate details of melody, harmony, and rhythm. In this way, their conception can vary considerably from one context to the next, as is evident from Schoenberg's own analyses. At times, a basic shape can be fairly inclusive as a point of departure, encompassing details of rhythm, harmony and melody. At other times, however it can seem more like a motivic feature, something held in common, a 'smallest common multiple' or 'greatest common factor'," 383–4.

[31] Schoenberg emphasizes this idea: "Whatever happens in a piece of music is nothing but the endless reshaping of a basic shape. Or, in other words, there is nothing in a piece of music but what comes from the theme, springs from it and can be traced back to it; to put it still more severely, nothing but the theme itself." "Linear Counterpoint (1931)" in *Style and Idea*, 290.

[32] *The "Great Appendix" to the Book of Changes: The Process of Universal Change* [from *I ching*, His Tz'u, I] in *Sources of Chinese Tradition*, compiled by Wm. Theodore de Bary, Wing-tsit Chan, and Barton Watson. Introduction to Oriental Civilization, ed. Wm. Theodore de Bary (New York: Columbia Univ. Press, 1960), 212.

[33] van den Toorn, "What's in a Motive?" 372.

[34] For more on Schoenberg's dialectical oppositions, see Cherlin, 158. Similar to the concepts of *yin* and *yang*, Cherlin gives dialectical opposition the following definition: "The process wherein progress, change or some desired resultant is obtained through antagonisms or other types of opposition applied to matter, ideas, values, emotions, etc. The *opposition* is normally dyadic, pitting two forces, ideas, values, etc. against one another to result in a third force, idea, value, etc. The *opposition* can be conceived of as *necessary* in that the resultant (i.e. the third force, idea, value, etc.) cannot be obtained without it. Although normally dyadic, the concept of dialectical opposition can be enlarged to include the resultants from complex force fields of opposition."

[35] Robert Fleisher also mentions *yin* and *yang* in relation to Schoenberg in his article, "Dualism in the Music of Arnold Schoenberg," *Journal of the Arnold Schoenberg Institute XII/I* (June 1989): 31: "In a somewhat more abstract variation of the same essential theme, a painting (one of two) entitled "Hands," Schoenberg's strange image of clasping hands is built up from long, flowing brush strokes of broken light and dark pigment. The symbolic meaning immediately springs to mind; dark to light, Yang and Yin of the Chinese symbols, the balance of two extremes."

Santrauka

***Yin* ir *yang* pagal Schönbergą: pusiausvyra ritmo plėtros variacijų kūrimo procese**

Pagal senovės kinų tikėjimą, *yin ir yang* simboliai nusako gyvenimo esmę. Nors *yin* ir *yang* yra priešingos jėgos, jos suvokiamos kaip viena kitą papildančios – abi yra būtinos, kad gyvenime sukurtų judėjimą ir pusiausvyrą. Pusiausvyra yra visų gyvenimo sričių pagrindas, ir muzika čia taip pat ne išimtis. A. Schönbergas, koncepcijos apie ritmo plėtros variacijas pradininkas, pabrėžė pusiausvyros muzikoje svarbą: „<...> sudaromas nerimasties, sutrikusios pusiausvyros būvis, kuris stiprėja didesnę kūrinio dalį ir kurį dar labiau sustiprina panašios ritmo funkcijos. Metodas, kuriuo atstatoma pusiausvyra, man regis, ir yra tikroji kūrinio *idėja*.“

Schönbergas aiškino, kad „ritmiškas“ – tai išsaugotas nerimasties būvis. Nors apie jo idėjas yra rašyta daug, bet apie ritminę plėtrą ir jos poveikį, atstatant pusiausvyrą, užsimenama labai mažai.

Viena *yin* technika, kurią aprašė Schönbergas, yra likvidavimas, kai detalės šalinamos tol, kol lieka tik „melodijos likučiai“. Tam, kad po tokio detalių pašalinimo būtų atstatyta pusiausvyra, taikomas *yang* metodas, vadinamas papildymu: detalės pridedamos iš anksto (išankstinis papildymas), paties likvidavimo proceso metu (interpoliacija) arba po jo (vėlesnis papildymas). Kitas metodas, vadinamas *Knüpftechnik*, apima *yin* ir *yang* bruožus, atstato pusiausvyrą.

Pranešime Schönbergo pusiausvyros idėja tyrinėjama, analizuojant kelis J. Brahmso kamerinius kūrinius. Vienuose pavyzdžiuose randamas pusiausvyrą po likvidavimo atstatantis papildymas, o kituose – *Knüpftechnik* metodas.

Kinų filosofija teigia, jog visiškoje harmonijoje neturi dominuoti nei *yin*, nei *yang*. Brahmso kameriniuose kūriniuose galima atrasti „visišką harmoniją“, kurioje *yin* ir *yang* sukuria nerimo būvį ir atkuria pusiausvyrą, o tai ir yra tikroji kūrinio idėja.

Marta Szoka

Genealogical Aspects of Creative Process in George Crumb

One of the factors that characterises contemporary musicology and theory of music is fetishism in treating the composer's technique with all its derivatives. From the other side, searching of the area of creative process is relatively rarely successful. Precisely made comparing analyses of drafts and sketches and the final version of the work disallow us for transpiring the mystery of creation. Composers themselves stay enigmatic, if ever make declarations on their creative process, usually limiting confine themselves to technical description. Witold Lutosławski, for instance, was quite sure that "it is necessary to think, talk and write about music" (Lutosławski 1999, 118). But he didn't believe that somebody will ever succeed in deciphering the most inner sense of music. An interesting exception can be found in articles by a Polish composer and music philosopher, living in Slovakia, Roman Berger. In his opinion, traditional model of the composer's situation has the following stages:

1. The composer chooses *n* of elements from the material assemblage with respect for the general system and following his own irrational ideas.
2. The composer chooses the next element (elements).
3. Confrontation of all choices with special respect for the formal models.
4. Appreciation of a result received so far.
5. Correction of a result received so far.
6. Choosing the next element or reproduction of previous elements.
7. Confrontation of all choices ... and following the scheme as above again (Berger 1984, 162–163).

Also Leonard B. Meyer emphasized a freedom of choice as a fundamental factor in the creative process: "Creation is possible because within the limits of his artistic inheritance – his tradition – the artist is free to choose among the implications he can discover" (Meyer 1994, 59, first edition: 1967). But the situation of a contemporary composer seems to be more complicated because all systems, schemes and models, being absolute in the past music, have been destructed. The "conscience of system" disappeared. The music has been reduced to the sum of sound material, to the collection of acoustic phenomena with unlimited possibilities. It is important to notice that Berger's diagnosis of contemporary music as an "ocean of entropy" was formulated in the middle of the 1980s, and even at that time, the early post-avant-garde period, there were some composers who presented a high level of integrity of composer's technique, composer's *métier* and aesthetics. As George Crumb, for example.

Among different definitions of creative process in music, the one formulated by Berger indicates just the attribute of integrity. He describes a creative process as an "action put on the course of the integral, complete entity, of the spontaneous integrity of new systemic qualities" (Berger 2000). Like in the organic processes, the final results are morphologically and structurally consistent. Creative process is comprehended by Berger as getting over linear rationalism, linear logics and linear causality. It leads to spontaneous morphogenesis of new artistic qualities and "has a structure of a dialogue with the musical substance, which is formed ontologically and historically" (Berger 2000, 709). The principle of "ontological plenitude" appears also in the Mieczysław Tomaszewski's method of integral interpretation of the music work, as a claim of perceiving a piece of art in all its natural phases of creation and in all signs of its existence in the area of culture, starting from the first conception – up to the phase of reception (M. Tomaszewski 2000, 56). Both authors, Berger and Tomaszewski, were inspired here by the works of Roman Ingarden, especially his *Utwór muzyczny i sprawa jego tożsamości,* Kraków 1957 (The musical work and the matter of its identity). Berger adds also, that a creative process one can consider as a "surmounting a gravity of material substance, of determinism of nature, including mental stereotypes" (Berger 2000, 704).

Many authors have emphasized recently a necessity of revision of previous points of view concerning the music analysis. Some aspects of the music work, being neglected as "non scientific"

by positivistic currents in contemporary musicology ("scientific orthodox" trends – T. W. Adorno), now return in different articles and books (J. Kerman, E. Tarasti, J. J. Eigeldinger, M. Tomaszewski etc.) as necessity of research for profound senses of music work and its values. Apart from examination of the problem of style, an expressive factor, an ethos of the work, the important role has also genealogical aspect. Genealogy, currently apprehended as a record of the descent from an ancestor, in the case of a music work contains the following elements:

1. The heritage of the composer, including tradition (especially national), historic experiences, canons, patterns;

2. The sources of the composer's style, including inspirations and "provocations" from the music and aesthetics of other composers (G. Crumb himself calls it a "stylistic affinity", Crumb/ Shuffett 1986, 34);

3. Composer's "self-conscience" verbally expressed (especially about his own music);

4. Individual experience and impressions of the composer;

5. Composer's artistic preferences (art, poetry, literature, theatre etc.);

6. "Reacting, interacting, following, paraphrases, parodies, neglecting" (Tomaszewski 2000, 61).

All these elements, in different ways and with different intensity, could influence a composer's creative process. Let's examine the case of George Crumb.

George Crumb belongs to the group of the 20th century composers of very specific, recognisable style, although sometimes his music is indicated as an example of the eclectic art. This polarity is connected partly with geographical and cultural conditions and different paradigms inside the Western culture. American critics usually focus on the Crumb's independence of American academic tradition (E. Borroff), on his remaining distance to experimentalism and intellectual trends of modern art. For an European audience the most important fact seems to be an unusual synthesis of sonoristic visions with symbolism, archetypes and creative dialogue with medieval and Baroque music. This aspect proves him to be a representative of postmodern art. That's why Crumb's idiomatic style is better perceived in context of contemporary American music, – especially in compare to other composers of his generation (Elliott Carter, Milton Babitt, Lucas Foss) and *minimal art*, – than in general context of Western music of the second half of the 20th century.

The list of George Crumb's works is not very extended in quantitative and formal senses: there are about 40 titles of compositions (including 3 orchestral pieces and 3 developed long cycles). It is difficult to classify all of them. There are no certain types of music, as for instance stage music or choir music, on the list. The composer has very clear preferences such as chamber music for different instrumental groups, also with a voice (58% of all works) and piano music (30%). Except the early period of "composer's apprenticeship" under the patronage of Ross Lee Finney, one of the American serialists, there are no great transformations of style in Crumb's output. At the beginning of his activity Crumb tried to combine *pointilism* and *Klangfarbenmelodie* with rhythm and pitch structuralism. Starting from *Five Pieces for Piano*, written in 1962, one can say about original own style of Crumb. Its recognizable characteristics are: economy of composer's means, transparent texture and special sound effects emitted off the inside of piano. Next year brings the first of his several works inspired by Federico Garcia Lorca, *Night Music I*. The poetry of Lorca is another constant element in Crumb's style. Progressively, the sonoristic aspect of music attainable to his unusual sense of timbre color and almost unlimited innovative composer's means with exploiting of new modes of playing instruments – conventional or non-conventional, of new vocal techniques and other sound sources, including amplification, became more and more important.

Looking back to the typology presented above let's notice the "key" aspects of artistic genealogy of George Crumb.

1. The influence of historic tradition:

a) Middle-Ages – Crumb is fascinated with numerology and astrology (*Makrokosmos, Black Angels*);

b) Baroque – the way of using by the composer instruments and the method of building a music form that reminds Baroque idea of a concerto, as well as a texture and figurative element (e. g. *Pastoral Drone*);

c) Romanticism – the idea of programme music (e. g. *A Haunted Landscape, Black Angels etc.*).

2. The composer himself mentioned Charles Ives, Olivier Messiaen, Luciano Berio, Bela Bartók, Claude Debussy and Anton Webern as composers with whom he felt "a certain stylistic affinity".

3. Crumb's pronouncements on the main aspects of composer's *métier* concern the following problems:

a) **General sense of music:**

• *Music might be defined as a system of proportions in the service of a spiritual impulse* (Crumb1986, 3);

• *I have always considered music to be a very strange substance, a substance endowed with magical properties* (Mac Lean 1986, 20);

• *Music presents us with a dichotomy of thought and intuition* (Crumb/Shuffett 1986, 35);

b) **Ontological aspect of music:**

• *I am often haunted by the thought that all of the many musics of the world are coming together to form* ***one*** *music* (Crumb 1986, 5);

c) **The future of music:**

• *There is, to be sure, a sense of adventure and challenge in articulating our conceptions, despite the fact that we can take so little for granted (...) I sense that it will be the task of future to somehow synthesize the sheer diversity of our present resources into a more organic and well-ordered procedure* (Crumb 1986, 17);

d) **Feeling of the presence of the past:**

• *One very important aspect of our contemporary musical culture – some might say the supremely important aspect – is its extension in the historical and geographical senses to a degree unknown in the past. (...) Perhaps we have come to think ourselves as philosophically contemporaneous with all earlier cultures. And it is probable that today there are more people who see culture evolving spirally rather than linearly* (Crumb 1986, 16);

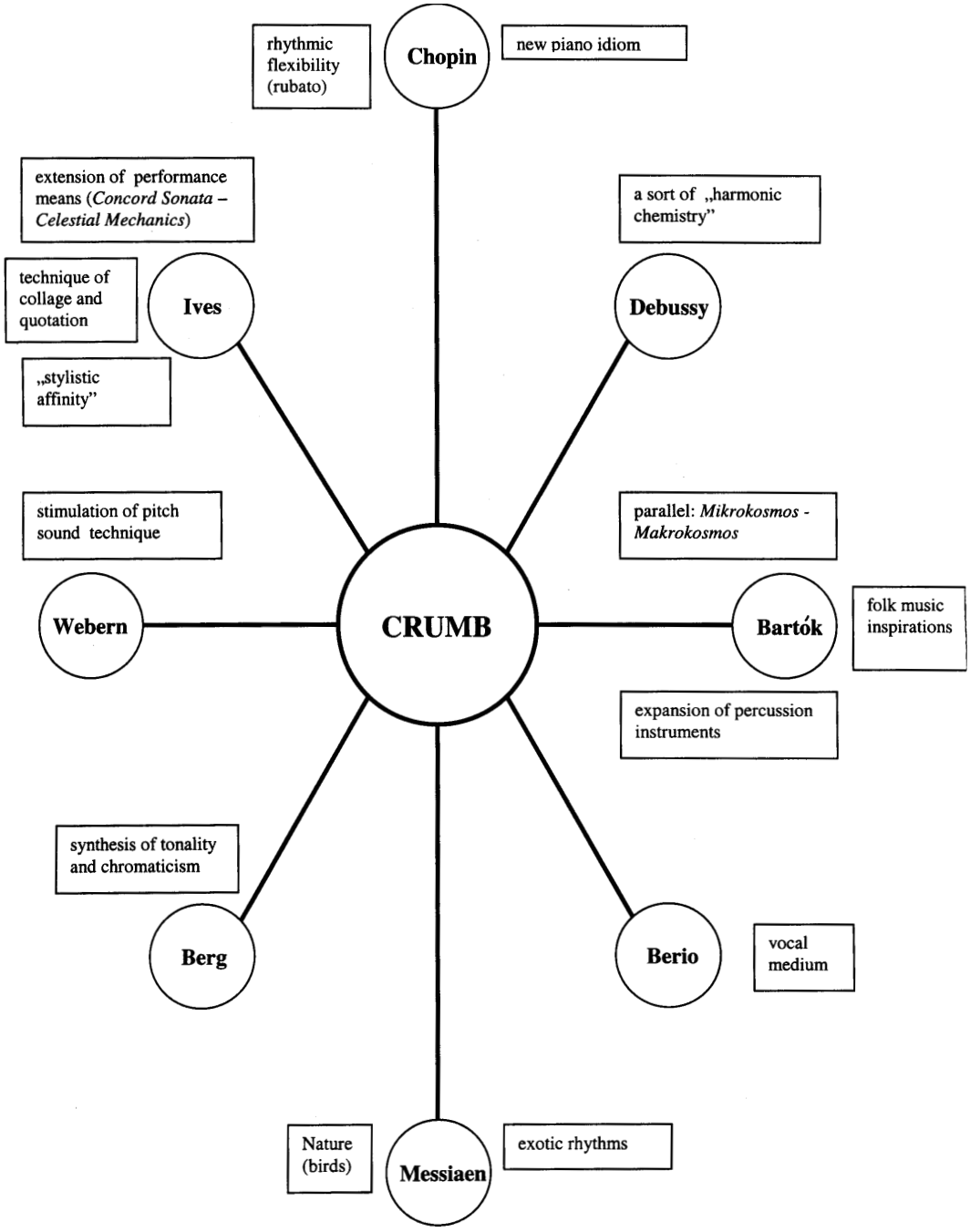
e) **Individual experience:**

• *I suspect that the truly magical and spiritual powers of music arise from deeper levels of our psyche. I am certain that every composer, from his formative years as a child, has acquired a "natural acoustic" which remains in his ear for life. The fact that I was born and grew up in an Appalachian river valley meant that my ear was attuned to a peculiar echoing acoustic; I feel that this acoustic was "structured into" my hearing, so to speak, and thus became the basic acoustic of my music. (...) In a broader sense, the rhythms of nature, large and small – the sounds of wind and water, the sounds of birds and insects – must inevitably find their analogues in music* (Crumb 1986, 19).

4. In his reminiscence about the childhood spent in the Appalachian mountains (see: **3.**e) Crumb emphasized the important role of the personal, individual experience of Nature, with its acoustic richness. The way of his intensively experienced contact with Nature must be considered as the main source of his idiomatic sound language. Besides, in the post-avant-garde time of enormous accruement of new elements of vocabulary in the areas of pitch organization, rhythm, timbre etc., integrality of Crumb's music results from his belief in the ancient idea of music being a reflection of nature.

5. Federico Garcia Lorca seems to be Crumb's favorite poet. In 1963–1970 the composer wrote six pieces with the poetry of the Spanish author. Both of them have in common such themes as Nature, death, time (e.g. *Eleven Echoes of Autumn*), and both are fascinated with mystery, hidden senses and symbols (as the moon, water, earth, dream, darkness etc.). Both artists use in their works, with different languages of course, intensive dark pictures and subtilized sonority. Very similar themes and aura are symptomatic also of Walt Whitman's poem *When Lilacs Last in the Dooryard Bloom'd*, the only Whitman's poem musicalized by Crumb in his *Apparition* (Szoka, 2001).

6. Undoubtedly, the trait which connects Crumb with American poetry in general, is contemplation of the Nature. The idea of sacralisation of the Nature's beauty, was proclaimed by transcendentalists (Henry David Thoreau, Ralph Waldo Emerson), and distinctly expressed by Whitman – among others. Hence it appears in many of Crumb's works a feeling of unity with the Universe (*Night of Four Moons,* for instance).



For me, composition is a very slow and laborious process involving the testing of, and choosing from among, various possibilities (Crumb/Shuffett 1986, 35). In these words we can find one of rare remarks made by Crumb on his creative process. More precise description of the Crumb's manner of work was presented in the biographical article by David Cope: "Crumb continues to work very slowly, often completing but one work a year. He believes in strong initial conceptions which propel him into an obsession to develop and complete a new work. David Burge described these early stages of composition: *...when starting a new piece gives the outward impression of having all the time in the world... He wanders distractedly to his study and tries a single sound on the incredibly decrepit hulk of piano that inhabits the room – an untunable, unplayable piano. He tries the sound, varies it, a douzen times, a hundred times. Then to the desk to write himself a note... And leave it in the chaos of letters and manuscript*" (Cope 1986, 15). In the opinion of Suzanne Mac Lean, "...the compositional process is for George Crumb not only an involvement in the symbols and sounds of music but a spiritual quest as well" (Mac Lean 1986, 25).

Christopher Wilkinson indicates, however, that in the compositional process of Crumb an important role plays his sense of music form, his "slow and laborious struggle to achieve *significant form*. Even though his music projects an aura of spontaneity (and can even sound improvisatory), a close analysis shows a logical and organic structure based on *classical* principles" (Wilkinson 1986, 61). For the author of this article, the most essential Crumb's feature seems to be an integrality of all spheres of – returning to Berger's terminology – "musicgenesis", that means a consistence of a composer's conscience of system and positive dialogue with the music history, the sphere of individual experiences with a feeling of universal spirit of culture. His music sometimes reminds us gentle murmurs with subtilized dynamic and timbre colour scales; sometimes it is music of gently waving tensions, sometimes overwhelming with fear, sometimes close to the trance athmosphere. It seems to be organically sinked into the reality of outside world and into inner, intimate spheres; it is the music of mystery landscapes, distant (even cosmic) spaces, dark oceans and bizarre dreams; no matter how complicated structurally its creative process was.

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Santrauka

Georgo Crumbo kūrybinio proceso genealoginiai aspektai

G. Crumbas priklauso grupei XX a. kompozitorių, kuriems būdingas specifinis, lengvai atpažįstamas stilius. Jo savitos muzikinės kalbos šaltiniai gana įvairūs: tai ir nepaprastas garso spalvos pajautimas, neišsenkančios novatoriškos kompozicinės priemonės, ir dvasinio, o kartais intelektualinio pobūdžio idėjos ir sumanymai. Postavangardo laikais, kai muzikinėje leksikoje nuolat daugėja terminų, nusakančių garso aukštį, ritmą, tembrą ir t. t., Crumbo muzika tampa nepakeičiama, ir tai yra jo tikėjimo senąja tiesa, kad muzika yra gamtos atspindys, išdava.

Pasitelkdama R. Bergerio muzikos „morfogenezės" koncepciją, autorė tyrinėja Crumbo kūrybinio proceso genealoginius aspektus. Kūrybinis procesas čia suprantamas kaip linearinio racionalizmo, linearinės logikos ir linearinio priežastingumo įveikimas, vedantis į spontanišką naujų meninių bruožų morfogenezę ir pasižymintis dialogo su ontologiškai ir istoriškai formuojama muzikine substancine struktūra. Pranešime nagrinėjama ikikūrybinė fazė, muzika *in potentia*, pirminės ir dar galutinai nesusiformavusios kompozitoriaus idėjos bei vaizdiniai, įkvėpimo šaltiniai, jų tarpusavio sąveika ir visos „jo atrandamos prasmės" (L. B. Meyeris).

Panayiotis A. Kokoras

Morphopoiesis: Towards a Creative Process of Structuring Form

Abstract

Composers have always needed tools to craft their music and theorists need a methodology to analyse compositions. This paper examines a theoretical framework of a creative procedure for structuring musical form. It studies the organising principles of the internal attributes of a musical work that give a unit its specific identity, the functional relationships between it and other units, and the ordering and direction of those units. During recent decades, timbre as a basic form-bearing dimension has attracted the interest of an increasing number of composers and theorists. In the light of this interest, a formulation to define the structural procedures of form becomes indispensable as a result of the new content and the new questions which it raises.

Different procedures for structuring form have been developed throughout the history of western music. They have always been related to the content, to the musical material used in each period. A brief retrospection is presented, from the Middle Ages to the present, of the evolution of form as a process. This historical survey concludes with a definition of the process of *Morphopoiesis* and suggests a next step in the evolution of musical form. The proposed framework continues with a more in-depth analysis of *Morphopoiesis*, analysing it into four hierarchically-ordered levels. From the highest to the lowest levels respectively these are Cognition & Perception, Motion, Typo-morphology and Transformation. The Transformation level is further refined by a description of the main transformation form types and their sound process domains. An array of researches and theories has been taken into account to form the levels of *Morphopoiesis*. Several theories and concepts are included from works on psychoacoustics, music perception and cognition by McAdams and Bregman, on sound morphology and typology originally introduced by Schaeffer, and on spectromorphology by Smalley.

Morphopoiesis integrates all these theories into a general procedure which aims to provide a better insight into how form is structured, and therefore a better understanding of the music itself. *Morphopoiesis* is a tool for listening to, analysing and making music of all kinds, ranging from electroacoustic music to instrumental and vocal music. It is the abstraction of the creative process at its fundamental level, the form.

1. Introduction

Although it is evident that music takes place in time, it has always been a compositional issue about how form unfolds in time. The word *form* itself can sometimes cause confusion by referring either to a generic type – the overall structure of a composition such as symphony or mass, or to procedures that define how sound units are put together to make phrases and sections. This paper focuses on the latter procedures, on form-creating devices in which small bits of material are treated to many different presentations and combinations (DeLone 1975). It examines structural processes that determine all the note-to-note – or better, sound-to-sound – details.

For centuries, the main form-bearing musical elements were melody, harmony and duration. From the way these musical elements are used, an experienced listener can easily identify the century in which a composition was written, even the composer by whom it was written. During the last few decades, however, a new dimension has begun to emerge as a form-bearing element, that of timbre[1] (McAdams 1983). The use of timbre as a form carrier may suggest a new content, a primary material ready to be shaped and to acquire form. The concept of form as unified with content constitutes a key to the better understanding of musical organisation. As Edgar Varèse has said, "Form and content are one. If there is no form, there is no content, and if there is no content, there is only a rearrangement of musical patterns, but no form" (Varèse 1936). The new relationship between timbre and form does, however, bring to the fore some questions. How can timbre be a form-bearing element? What are the procedures that empower it with such attributes? What sort of process should it be run through? How is it connected with musical form?

The change from one type of form-creating device to another is related to the content, in other words, to the sound material used each time. As well as the endogenous evolution of musical elements throughout the history of western music there are also some exogenous influences that have dramatically increased the use of timbre today. Music technology has played a catalytic role in expanding sound possibilities and changing our cognitive and perceptual approaches to sound. Leading research institutes such as the GRM and IRCAM in Paris, the CCRMA in Stanford and the Institute of Sonology in The Hague are some of the centres in which a considerable amount of work on timbre and its relation to form has been done and is still being done. In addition, new instruments, both hardware and software, have been introduced which are capable of producing almost any sound one can imagine. Software tools such as the phase vocoder, the sound editor and the sequencer have become easily accessible to composers today. As far as instrumental sound is concerned, again the use of computers and software has made it possible to manipulate an incoming signal instantly during a performance. In addition, in instrumental tradition, new ways have been developed for the manipulation and control of the sounds that instruments can produce: an early example of this is that of Bartolozzi (Bartolozzi 1982) and his 'timbral techniques', the so called extended techniques.

This paper will propose a general procedure for structuring form, a process that could encompass a great deal of electroacoustic music as well as a great deal of the mixed, instrumental and vocal works of recent decades.

2. The phenomenon of *Ithaca*[2]

Timbre as a form-bearing musical element has undoubtedly been of great interest among composers and theorists since the 1950s, especially those who use the electroacoustic medium. A basic approach that could ascribe formal attributes and musical discourse to timbre is the notion of transformation (Smalley 1997). This term can be used to describe structural procedures that shape the sound in time. The notion of sound transformation could be defined as the apparently 'natural' continuation of a sound texture or gesture with emphasis on the process of gradual change from something to something else (Landy 1991). Sound transformation is important because it provides the fundamental procedure for forming timbre. A transformation can give functional meaning to the growth of form. There are several early examples from the electroacoustic repertoire where timbre acquires formal content through its change in time.

The composer Trevor Wishart has stated that he finds the interpolation aspect of a given sound transformation more important than its departure and arrival points (Wishart 1994). Essentially, his thought is that the way a transformation is developed in time is more important than just the transformational concept itself. Alvin Lucier, in his work *I am sitting in a room* (1970), builds the work through a gradual transformation of speech into singing. The step-by-step disintegration of the speech and the reinforcement of the resonant frequencies becomes the focal point for the listener. As Lucier said, "... what we found interesting was the gradual process itself" (Lucier 1980). Another early example of transformation can be heard in Jonathan Harvey's work *Mortuos Plango, Vivos Voco* (1980), in which the sound of a struck bell occasionally seems to melt into the singing voice of his son as if this were a natural continuation of the sound (Harvey 1980).

There are, however, other trends and musical styles that keep the sound objects, but change the context: a sort of transformation that concerns a spatial or contextual transformation, not directly a sound transformation. The composer Denis Smalley uses the term 'transcontextuality' to describe a process of transcontextual interpretation where listeners can be involved when the sound sources used in a composition are taken from nature or from cultural activities without change, or when the transformation applied to the sound does not destroy its original context (Smalley 1997). The concept of transformation will be further examined later in this paper, with an analysis of the main transformation form types and their sound process domains.

3. *Morphopoiesis* as a general procedure

In an effort to define more precisely a framework for a systematic form-creating device, this paper introduces the term *Morphopoiesis*[3]. It is proposed to give a rather specific and descriptive process paradigm of structuring musical form that derives from the interaction between content

and form. *Morphopoiesis* offers an abstraction of the primary principles by which a new musical form is built up. It focuses on the procedures of the inner formal characteristics of a musical work which give to a sound its specific identity, the functional relations between it and other sounds, and the motion and direction of those sounds. In contrast with past procedures of musical form which are based on musical elements such as rhythm, harmony and melody, *Morphopoiesis* is mainly based on timbre. It is an analytical tool for analysing, listening to, and making music of all kinds, ranging from electroacoustic music to instrumental and vocal music. It refers to music that concentrates its interest on changes in the intrinsic and extrinsic attributes of the sound in the flux of time.

This process can be more easily and effectively applied, however, in electroacoustic music where the composer, with the help of computers and specialised software, can manipulate, mix and process sound with great precision and detail. In instrumental music, the sound manipulation and control can be achieved either by the use of live electronics, where a computer can receive music as it is being performed and can process it and play it back in real time, or through fixed, pre-recorded electroacoustic sounds which are played together with the instrument(s).

The etymology of the word is simple: *Morphopoiesis* is a composite word consisting of the prefix *morpho-* which means structure, shape, form (from the Greek *morphē*), and the suffix *-poiesis* which means creation, formation, production (from the Greek *poiēsis*, which is formed from the verb *poiein* "to make") (Microsoft Encarta 2003).

The process of *Morphopoiesis* consists of four levels which will be further explained after a brief historical overview of the main form-processing types used in the past.

4. Form as a process: a retrospective

It is difficult to distinguish compositional procedures, since most of them imply some transformation of the initial material with the retention of certain essential original features (DeLone 1975). As a result, these procedures may not be entirely universal but they can be sufficiently general to give us a better understanding of the craftsmanship of musical form in each historical period. In all the structural processes of the past, the complex is created by combination of the simple, which remains discrete and unchanged in the complex unity (Chester 1970). Today, the notion of discrete and the notion of complex are not the same as they were in the past. Listening theories such as those of Bregman (Bregman 1990) or McAdams (McAdams 1989) and compositional approaches such those of acousmatic or spectral music propose new ways to experience and to understand music. The formal elements have changed and if Varèse's claim that "form and content are one" is correct, then the content has changed as well.

Every epoch in western music from the Middle Ages until the present is characterised by a general type of structural process, although not all music falls into these types. More than one formal method may be used, however, including intermediate types in the same period. Table 1 shows the four main structural processes, including *Morphopoiesis*. Each process is related to its era, the musical texture that characterises it and a representative form. In a more detailed way, Figure 1 represents graphically the same structural procedures by giving a simple example of each process. Each of them will be further explained below.

Table 1. The structural processes according to their historical period, musical texture and form. The names given for the structural processes have been chosen by the author, among others, in order to describe better their content.

Era	Texture	Form	Structural process
Middle ages	Monophony	Gregorian Chant	Text setting
Renaissance/ Baroque	Polyphony	Canon, Mass	Sectional variation
Classicism/ Romanticism	Homophony	Sonata	Developmental variation
1950-present	Current [4] textures	Current forms	Morphopoiesis

4.1. Text Setting

By the start of what is known as western music in the Middle Ages, church music is vocal, fluid and non-accentual in rhythm (Morris 1935), and the melodies are free and seem to wander, articulated only by the Latin liturgical texts to which they are set. They depend, that is to say, on the length and metre of the poetic stanza. The most common and simple among the formal patterns of this period are the repetitive formulas of the psalm tones of Gregorian chant.

An analysis of Figure 1 below shows that the first contour represents a consistent whole – something that remains consistent, an unchanging quality, which during the Middle Ages used to be based on liturgical texts with its main form type being the Gregorian chant. The music has a start and continues by unfolding the same small group of notes based on modes. It is articulated by the rhythm suggested by the text. There are neither distinctive themes or motifs nor any development or contrast.

4.2. Sectional variation

In the polyphonic music which was written from the Renaissance to the early Baroque, the organisational procedure outlined for musical formation was the *sectional variation* process. The basic musical units comprised melody and rhythm and functioned as a framework which extends itself by repetition while it builds up modulations of the initial notes and by perceptual inflections of the initial melodic, harmonic and rhythmic patterns.

In the second line of Figure 1 the starting point moves to the next step as an inversion, whilst the last step is an inverted retrogradation of the starting point. Along with imitation, both of these are very common techniques for creating musical form by the time of the Renaissance and the early Baroque. Other common forms using the structural process of *sectional variation* include the canon, round, ricercare and motet.

4.3. Developmental variation

In the period of Classicism, musical form is built from a network of inter-related motifs that take on new appearances within and between movements by the change of rhythm, melody, dynamics and instrumentation (DeLone 1975).

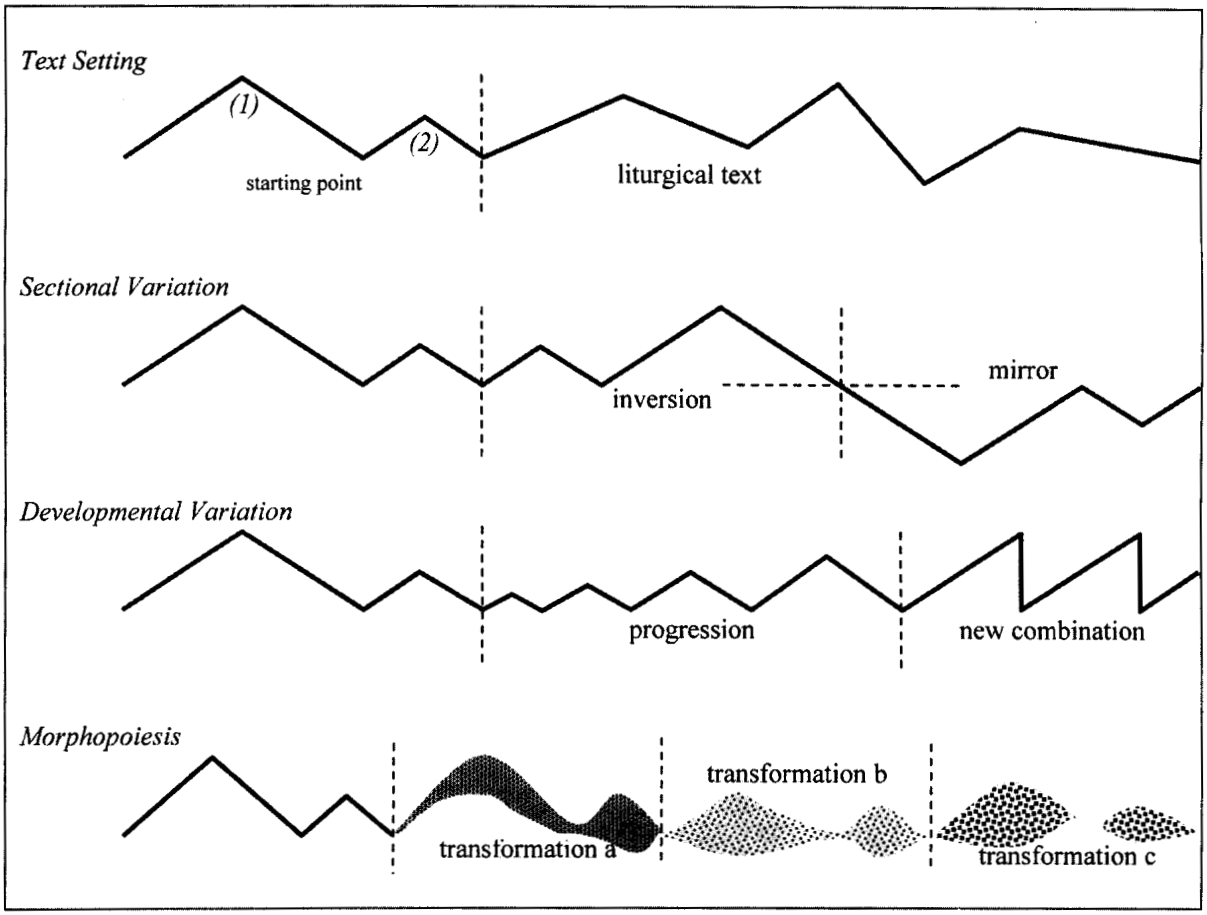
The third contour in Figure 1 shows the starting point and then demonstrates how the second part (2) of it creates a progression, possibly through the use of a harmonic chain. In the next stage, a new and contrasting idea is reborn from combinations and modifications of elements of the initial idea, but markedly different from the preceding stage. The most representative form of *developmental variation* structural process is the *Sonata-allegro*.

4.4. Morphopoiesis

For the period from 1950 to the present, the term *morphopoiesis* proposes a next step to the evolution of structural process in western music. At its base, *morphopoiesis* describes the way one sonic identity is combined with another through transformation. It is a perceptible process in that a listener is able to hear the process happening throughout the performance. This becomes unavoidable, especially in electroacoustic music where a representation of the music is not always necessary for the performance. Unlike electroacoustic music, in the previous types of structural process the notational representation can give a clear idea of the form of the piece before it is actually heard.

In Figure 1, the stages separated by dotted lines are not intended to represent a 'natural' musical flow but rather to show an example of some further steps in the process. The starting point represented by the black thick line is transformed to an even thicker texture in 'transformation a', although it keeps most of the melodic profile (Chion 1983) of the starting point. In the next stage, the spectral elements and the mass profile (Chion 1983) of the sound change more and the overall shape goes a step further away from the previous stage. Finally, in 'transformation c', the two parts of the initial idea are separated by silence and the whole morphology and spectral components of the two sounds now become even more different from the previous stages.

Figure 1. From top to bottom: the evolution of the compositional process from the Middle Ages to the Baroque, and from Classicism to the present.



5. Defining structural levels

A hierarchical framework of the four levels will now be introduced, from the fourth or highest to the first or lowest, with the scope to analyse the structural process of *Morphopoiesis* at its primary components. The categorisation of the four levels of *Morphopoiesis* takes into consideration the research done by several theorists and practitioners in areas such as music perception and cognition by McAdams and Bregman, sound morphology and typology originally introduced by Schaeffer, and spectromorphology by Smalley. *Morphopoiesis* integrates these theories into a general procedure that aims to provide a better understanding of how form is structured.

Table 2 summarises the levels and the descriptors of each level. A detailed explanation of each of them follows.

Table 2. The four levels of *Morphopoiesis* and its structuring formal elements.

Levels	**Description**
Fourth Level (Higher)	Cognition – Perception
Third Level	Motion – Texture - Gesture
Second Level	Identification – Classification - Description
First Level (Lower)	Transformation – Sound Process

5.1. First Level

The first level placed at the base of the structural process of *Morphopoiesis* is the transformation. This describes the form type of the gradual change from one point to another and the sound process(es) used for it in the flux of time. Transformations can normally be applied in a point to point form. This results in several other variations, of which the simplest are that of Binary transformation – from point A to point B (AB) – as well as Ternary transformation (ABA), Arch transformation (ABCBA), and so on (see Table 3). In addition, transitions from point A to point B may be realised *via* cross-stage steps called *transitional chains*. As a result of this process, for a binary A to B transformation extra steps can be added in between the start point and the end point to create a *transitional chain*. The degree of the gradual transformations can vary from fast to very slow, from a rapid succession of gestures that changes in time to a slow textual evolution. Landy suggests that sound transformation should happen gradually within a minimum of about four seconds in order for it to be perceived by the listener (Landy 1991).

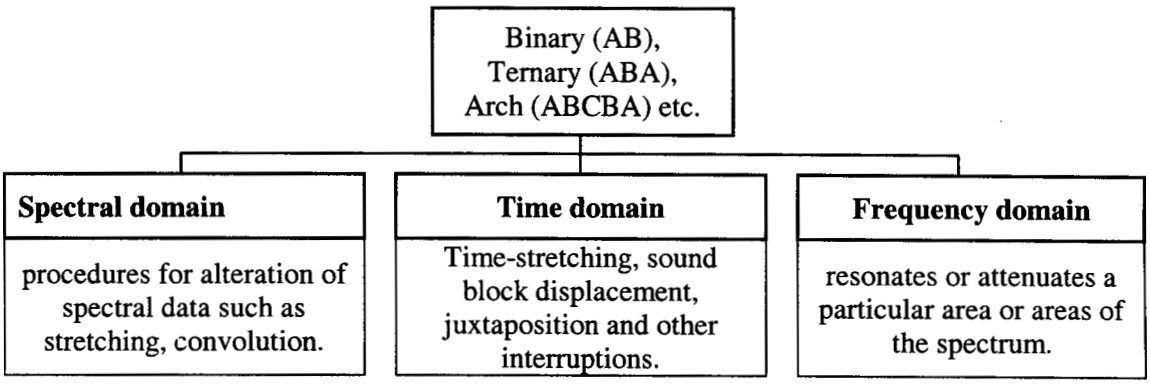
In addition, the first level of *Morphopoiesis* clarifies the sound process used for the transformation in its totality (see Table 3). That is, in addition to the independent process, the sound units themselves can undergo a general sound process which characterises the whole transformation. In practice, however, the technique most likely to be used is that which involves more than one sound process of the same domain, and even a combination of different domains. Nevertheless, it is not always necessary for a sound transformation to be interwoven by a sound process too, although this is most common.

Three are the main types of sound process:

1) *Spectral domain* – procedures for the alteration of spectral data such as spectral stretching and convolution;
2) *Time domain* – with techniques such as sound block displacement, time-stretching, interleaving, freezing and interruptive effects in time before certain blocks emerge; and
3) *Frequency domain* – processes like filters which resonate or attenuate a particular area or areas of the spectrum.

From the early 1970s, the composer Trevor Wishart developed a large number of procedures for sound processing almost all of which can vary through time. The Phase Vocoder is used to provide most of his spectral transformation tools such as spectral morphing, shifting, stretching, cleaning, banding, tracing, blurring etc. Wishart has said that, "the musical structure of the piece was conceived in terms of such transformations between sound types..." A more detailed documentation for all these tools can be found in his book *Audible Design* (Wishart 1994).

Table 3. The main transformation form types and their sound process domains.



Another process domain could be considered to be that of Context, or Space. However, the transformation realised in both of these is not directly related to timbre. In fact, the timbre remains unchanged while the aspect of context or space changes. Although the musical potential of context and space is of great interest, it is beyond the scope of this paper, since their transformational attributes are not directly related to timbre.

5.2. Second Level

The second level of *Morphopoiesis* considers the typo-morphological procedure; the specific identity of the sound material, the functional classification and relationship between it and other sound units, and the detailed description of those sounds. Once the type and process of sound transformation has been defined, the next level is required in order to study the sound material available as pure sounds without any contextual influence and to evaluate and arrange them into groups and categories. After being identified and classed, the sounds are described in great detail according to their intrinsic and extrinsic attributes. Schaeffer (Schaeffer 1966), in his description of *Solfège de l'objet Sonore*, proposes seven morphological criteria: mass, harmonic timbre, dynamic, grain, allure, melodic profile, and profile of mass (Chion 1983). Under these criteria, the whole structure gets a clearer and smoother direction through unified and coherent sound identities.

A proposition by Landy categorises binary sound transformations in five ways according to the following categories, four of which are parametric and one is contextual sorted:

1) comparable ... incomparable sounds,
2) discrete ... continuous,
3) short ... long,
4) representational ... abstract,
5) same sound ... different context (Landy 1991).

This categorisation does, however, assume an *a priori* integration with level one and it does not take into account the next two levels. Another example is that of Fischman, who has provided the following seven suggestions: Differentiability, Similarity, Duration, Linearity, Spatial movement, Diversions and Context which, depending on the circumstances and the context of a composition, may help in producing convincing results of sound transformation (Landy 1991).

5.3. Third Level

The next level in ascending order attributes motion and sets stronger relationships between spectral typologies and morphologies. The definition of motion and its classification into six categories (bi-directional, uni-directional, linear, curved-linear, reciprocal and centric/cyclic) proposed by Smalley is a comprehensive guide that characterises both small units and whole phrases or sections. The energy of motion is expressed through spectral and morphological changes. When the changes refer to the internal structure of the sound, the music is primarily textural without forward motion. In music which is primarily gestural, the changes refer to the external structure of the sound driving the material forward. All degrees of combinations between texture and gesture can appear within a single composition. An in-depth examination of the motion and growth process is provided by Denis Smalley's texts (Smalley 1994).

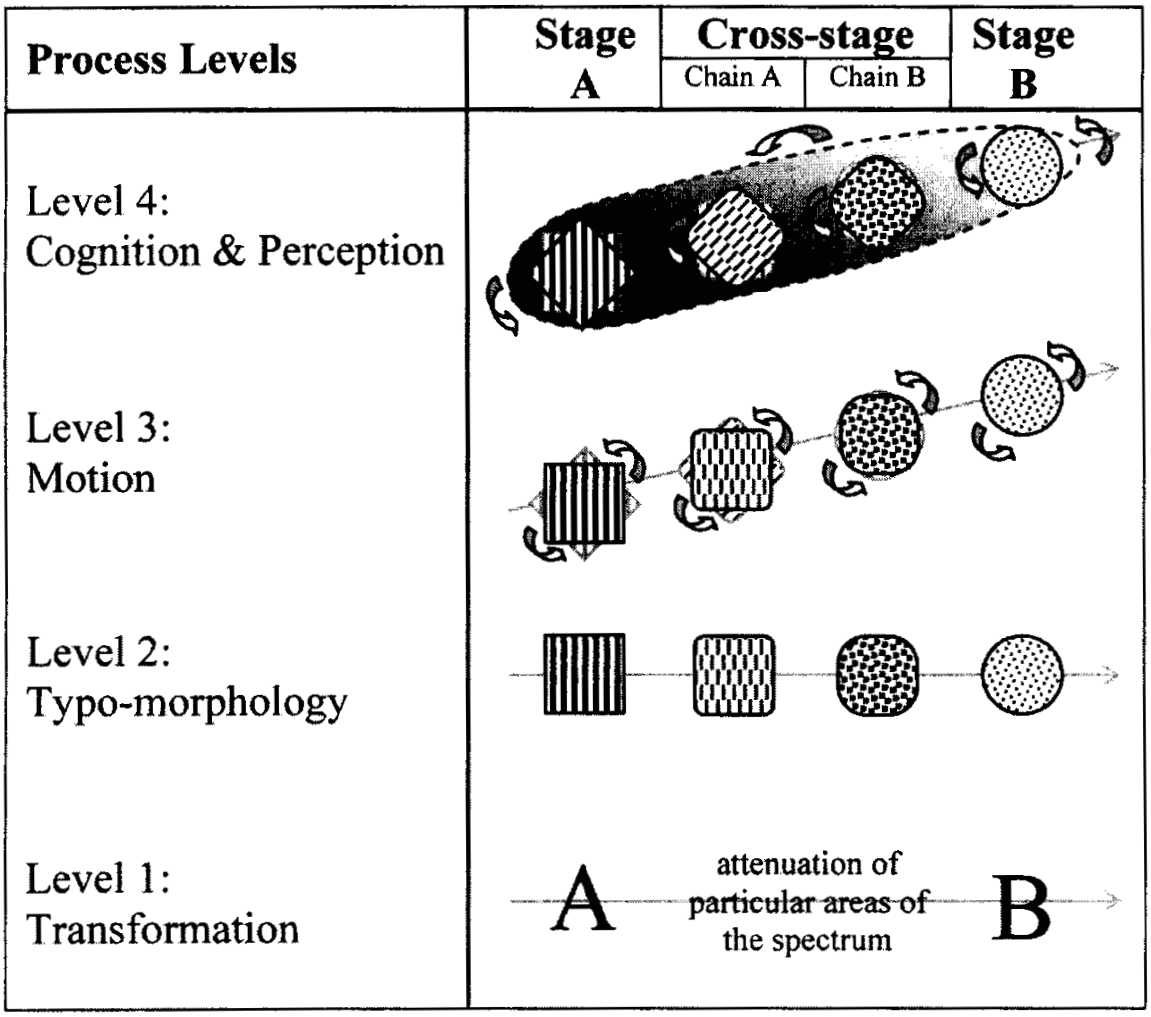
5.4. Fourth Level

The fourth and highest level of *Morphopoiesis* studies the relationship between sounds and the brain's interpretation of them. Perception and cognition are deliberately placed on the highest level to enable the listener to grasp a large-scale pattern if there is one, to understand the balance between units, or to connect the primary with the secondary parts of the music. This final stage is the level that aims to integrate all the previous levels into a whole.

Many recent experiments and theoretical approaches by researchers such as Stephen McAdams (McAdams 1989), Fred Lerdahl (Lerdahl 1992), Albert Bregman (Bregman 1990) and others have shown that structuring musical form itself is not enough if it cannot be understood by the listener. It informs the composer about the constraints and possibilities of the apprehension of musical form in terms of the perceptual processes and memory structures which are activated as form is accumulated in the mind of a listener. The interaction between composer and musical form depends on an understanding of both music cognition and perception.

There are several examples of music, such as total serialism and aleatoric music, where the form processes and the sounding music do not always have any audible connection. *Morphopoiesis* is a form process that must be heard when the piece is performed. It is a systematic framework for the way we listen to and appreciate music. It is necessary if a listener is to become aware of the new content while distrusting preconceived ideas and relying first and foremost upon what is heard.

Figure 2. The four levels of *Morphopoiesis* with an example of a Binary A to B transformation.



The representation in Figure 2 presents this process in greater detail.

It begins with Level 1 at the bottom where the two points A and B are identified and the two intermediate stages are being determined. This model can already be identified as a *Binary* transformation with a two-stage *transitional chain*. The *sound process domain* of the model is further clarified and its particular effect is revealed, which is a sound filtering process. This involves a continuous attenuation of particular areas of the spectrum. The *sound process domain* is considered to be an overall process that passes across the whole transformation. The use of the typo-morphological characteristics of the sounds at the second level helps the sound material to be placed in order and classified into different types and groups according their morphological characteristics.

At Level 2, the corners of the square graphic representation of the sound take on a more and more rounded shape until they eventually become a circle. Concurrently, the sound filtering process is applied gradually.

At Level 3, the individual sonic units acquire motion; a rotating motion is achieved through spectromorphological variation. At the same time, a slow ascending motion adds direction to the rotational motion leading the listener to expect possible outcomes.

Finally, at the top level, the primary sonic units lose their individual identity and contribute to a totality. The whole transformation sounds like a spinning gesture that moves upwards while its spectral density attenuates and eventually moves to the destination point. The same time, the sound qualities change from rough (square) to rather glossy (circle). It becomes a compound sound object that bears functional elements able to create expectation and tension, to create music.

6. Conclusion

The concept of *Morphopoiesis* suggests a creative procedure of structuring musical form. It studies how the smallest sound units are put together to make phrases and sections: to make music. It summarises the work done by numerous practitioners and theorists over recent decades on the organised use of timbre and its perception. Although the knowledge and the experience acquired over all these years covers a great many of the aspects and approaches to this process, they were disparate and widely-scattered without a single unifying thread to connect the elements. I hope that the unified approach proposed in this paper can offer a systematic and in-depth tool to both theorists and composers, a tool for the better understanding and appreciation of a considerable amount of the music today. That is, music which focuses on changes to the inner and outer attributes of the sound in time. This is best represented by the majority of electroacoustic music, as well as by a number of instrumental and vocal works.

Unlike conventional procedures of form which are based on musical elements such as rhythm, harmony and melody, *Morphopoiesis* is related mainly to timbre. The use of sonic attributes as a form-bearing dimension has undoubtedly opened up new possibilities for the composer. At the same time this new content has raised the question of what is the procedure of structuring form by means of timbre. On the basis that timbre can be a main form-bearing element and that content is strongly related to form, then this new content must suggest a new form as well. However, there is no past reference at all, at least in western music, to describe such a procedure. *Morphopoiesis* provides a basis that aims to identify and clarify a general procedure capable of giving an exegesis about the relationship between content and form. It also offers an analysis of the primary principles on which the potential new musical form is built.

The better understanding and refinement of structuring procedures can help us to appreciate and create a more successful articulation of the musical form. This is important because form can be considered as one of the main components by which coherence in a musical work can be achieved and through which a listener can experience music at its finest qualities. Although this can be true for any music of any time, this same general truth claims the process of *Morphopoiesis*.

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Notes

[1] The term *timbre* refers to the intrinsic and extrinsic attributes of a sound to which we can ascribe meaning (Smalley 1994).

[2] The word *Ithaca* refers to the title of a poem by the Greek poet Konstantinos Kavafis. It implies that the moment of Odysseus's return to the island of *Ithaca* after the Trojan War has no meaning in itself, but that the ten-year journey to reach *Ithaca* is the crucial issue (Kavafis 1911).

[3] In Greek the word *Morphopoiesis* is used by Civil and Electrical Engineering, Electronics and Metallurgy to imply physical transformations such as moulding, shaping and forming. I first heard the word *Morphopoiesis* in a musical context from my composition professor, I. Ioannidis. According to him, the word refers to the process of making structures in music (I. Ioannidis, "Writings for the music – VIII: *The expressiveness of structure and the structure of expressiveness*" – translation by the author).

[4] By the word *current* I do not imply a certain era or form, but refer simply to the time I am writing this paper.

Santrauka

Morphopoiesis: kūrybinio proceso suteikiant formą link

Kompozitoriams visada reikėjo instrumentų muzikai kurti, o teoretikams – metodologijos kūriniams analizuoti. Pranešime analizuojami teoriniai muzikinės formos suteikimo pagrindai ir nagrinėjami muzikos kūrinio savybių, suteikiančių jo elementams išskirtinumo, organizavimo principai, funkciniai ryšiai tarp kūrinio elementų, šių elementų tvarkymas ir valdymas.

Pastaraisiais dešimtmečiais vis daugiau kompozitorių ir teoretikų domisi tembru kaip pagrindiniu formą išryškinančiu veiksniu. Dėl šios priežasties ir atsiradus naujam turiniui bei iškilus naujiems klausimams kyla būtinybė suformuluoti formos suteikimo procedūrų pavadinimus.

Per visą Vakarų muzikos istoriją būta įvairių procedūrų formai suteikti ir visada jos buvo susijusios su turiniu bei su muzikine medžiaga, būdinga tam laikotarpiui. Pranešime trumpai pristatomas formos evoliucijos procesas nuo viduramžių iki šių dienų. Ši istorinė apžvalga, kuri užbaigiama *morphopoiesis* proceso apibrėžimu, inspiruoja tolesnį žingsnį muzikinės formos evoliucijoje. Siūloma sistema pagilina *morphopoiesis* analizę, išskaidydama ją į keturis hierarchiškus lygius. Nuo aukščiausio iki žemiausio lygio tai būtų pažinimas ir suvokimas, judėjimas, tipologinė morfologija, transformacija. Transformacijos lygis dar skaidomas detalizuojant pagrindinės transformacijos formos tipus ir jų garsinių procesų sritis.

Nustatant *morphopoiesis* lygius, buvo atsižvelgta į daugybę tyrinėjimų ir teorijų, tarp jų į teorijas ir koncepcijas iš įvairių mokslinių darbų: McAdamso ir Bregmano apie psichoakustiką, muzikos suvokimą ir pažinimą, Schaefferio apie garso morfologiją ir tipologiją, Smalley'o apie spektromorfologiją.

Morphopoiesis integruoja visas šias teorijas į vieną procedūrą, kurios tikslas yra padėti suprasti, kaip yra suteikiama forma, taip pat ir pagilinti pačios muzikos suvokimą. *Morphopoiesis* padeda girdėti, analizuoti ir komponuoti įvairiausią muziką, nuo elektroakustinės iki instrumentinės ir vokalinės. Tai kūrybinio proceso pamato – formos – esmė.

Deborah Ungar

Perception of Time and Reflection in Music: Alfred North Whitehead and Elliott Carter's *String Quartet No. 2*

Regarding Elliott Carter's compositional output, scholars have commented on and analyzed influences attributed to philosophy, literature, film, and dance. Most notable among these include Jonathan Bernard's 1995 article, *Elliott Carter and the Modern Meaning of Time*. In various interviews, lectures, and essays, Carter himself discusses at some length how these subjects have been influential on his thinking, and have thus contributed to his approach in solving musical problems (the kernel of inspiration in his compositions) in various interviews, lectures, and essays. His main ideas and developments throughout the past seventy years include all-interval chords, polyformal compositions, metric modulation, polyrhythmic activity. The String Quartets of Elliott Carter serve as a compendium of creative devices, influential elements, and inspired innovation. Although his main interests were always in the field of music, while at Harvard University in the 1930s, Elliott Carter studied literature, Greek, mathematics and philosophy. (As he stated, this was in part a reaction to the mainly conservative track of the music department there.) He commented that he "'was greatly affected by the reigning philosophies of the period,'" including Irving Babbitt and, more importantly, there was Alfred North Whitehead and his 'Philosophy of Organism,' which "made a deep impression."[1] The content of many of Carter's lectures and essays over the past 50 years attest to the fact that these subjects have been life-long interests. Although it is fair to say that Carter does not make a literal comparison between his String Quartets and the philosophical ideas of Alfred North Whitehead, I believe that it is an instructive to do so. I will present an overview of the philosophical theory of one of the philosophers who most influenced Carter, Alfred North Whitehead, and show how this philosophical theory can be used as a guide to *String Quartet No. 2.*

The branch of philosophy under consideration is metaphysics or 'speculative philosophy,' which traditionally consists of two components. The first is ontology, which "attempts to identify the nature, the essential properties, and the relations of any thing that is." The second is cosmology, which concerns "the fundamental relationships, interactions, and processes within the totality of being (or the cosmos)."[2] The goal of any successful theory of metaphysics, then, is to reconcile the two branches with each other in a formula that enables us to understand *things* as separate, distinct entities and the binding relationships that exist between them.[3] One of the initial hurdles to understanding the concepts contained in this philosophy is coming to terms with the manner in which Whitehead uses language. "Whitehead was convinced that ordinary language contained within it hidden assumption about the nature of reality that were misleading and incorrect for the purposes of accurate metaphysical analysis."[4] As a result, his writing is filled terminology unique unto itself and will be defined as it is encountered in this discussion.

Whitehead's background consisted of scientific reasoning and thought in the area of mathematics and logic. In fact, nearly all of Whitehead's work before arriving at Harvard, where he accepted a professorship in 1924 at the age of sixty-three, "concerned mathematics, symbolic logic, and mathematical physics," collaborating with Bertrand Russell on *Principia Mathematica*, published 1910–1913.[5] Whitehead's subsequent ventures into general philosophy may be more readily understood with this background knowledge. In his later thought, which is the topic of the present discussion, Whitehead discusses "insights achieved and expressed in art, literature, religion, the humanities, and ordinary common sense" in his search for a metaphysical philosophy of existence and being – only in this way will any comprehensive theory "result in a view of reality that is faithful to the complexity and diversity of our actual experience."[6]

This philosophy, termed the 'Philosophy of Organism,' was developed mainly in the 1920s and 1930s. Whitehead's seminal work in this domain is *Process and Reality*, published in 1929. 'Philosophy of Organism' consists of a theory based in the process and experience of existence – hence, reality. Whitehead's philosophy rests on the belief that the key to finding rigorous explana-

tions for reality must be discovered in our own subjective experience. This must be so, for if it could not be found in ourselves, then the reasoning is that it would not be applicable to all things and, hence, not universally true.[7] I believe it is the idea of a universal outlook with a foundation resting on the common experience of all things that caught Carter's interest.

Actual Entities

The 'Philosophy of Organism' is a complex association of sequential states of being where we are constantly either increasing or decreasing concrescence with other "actual entities." Immediately we see that a few terms need to be defined. Concrescence is a word derived from the Latin *concrescere*, which means to grow together, collect or be formed. In biology it signifies "a growing together of parts originally separate."[8] 'Actual entities' (or 'actual occasions') "are the final real things of which the world is made up... The final facts are, all alike, actual entities: and these actual entities are drops of experience, complex and interdependent."[9]

Hosinski clarifies this topic by describing "actual entities" as a "moment of experience." All "actual entities" exist in the world equally, with greater or lesser importance to other "actual entities" and include within themselves relationships with past and future experiences. "This single moment is complex, because it bears within it relationships to all the moments that occurred before it and to all the moments that occurred after it in that person's life. It does not exist in isolation, but in relation to other moments."[10] These 'moments' exist as reality through their alignment sequentially. They "stretch from birth to death and if we cut or slice through this life, we will encounter a single actual entity, a single 'moment' of experience." A single moment of experience, therefore, must have some "thickness" or duration and this is what we call the present. "The passage of time measures the transition from actual entity to actual entity," or successive instants.[11]

In *String Quartet No. 2*, Carter develops the idea of "character-patterns" or "character-continuities" which are "associations of intervals, metronomic speeds, polyrhythms and rhythmic characters used to dramatize the musical personalities of instruments or instrumental groups and to make clear the stratification of texture."[12] David Schiff, in his book, *The Music of Elliott Carter*, lists these character patterns for each instrument of the Second Quartet.[13] (See Figure 1.)

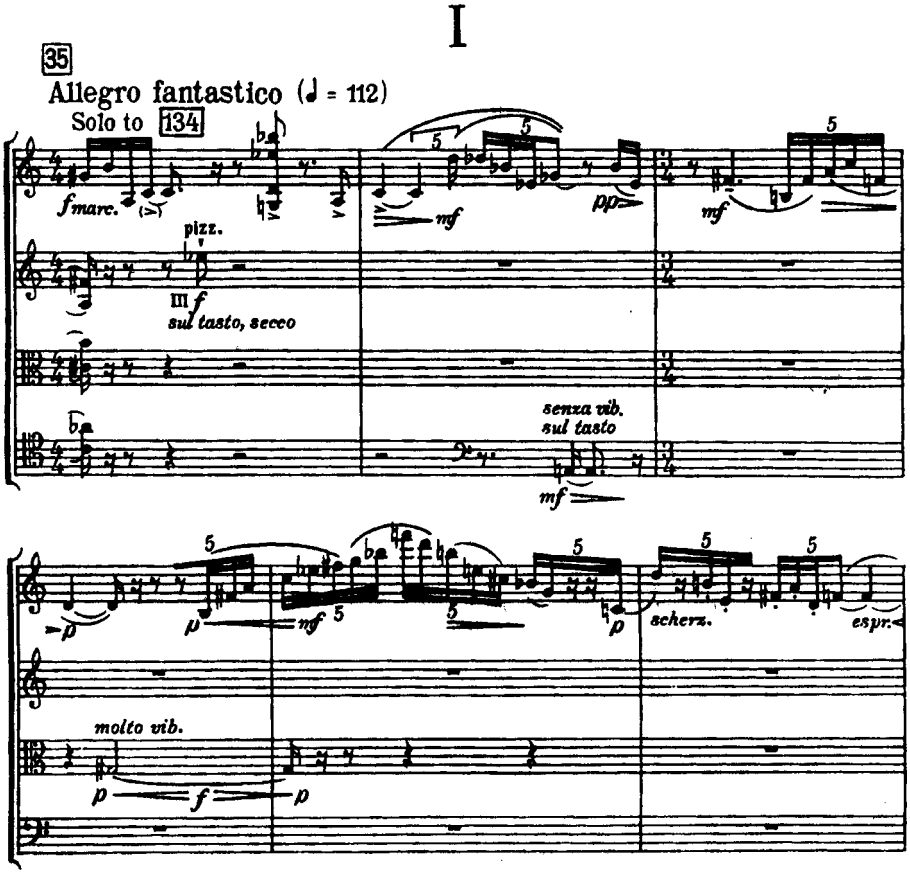
Figure 1. Chart of character patterns as revealed in Carter's *String Quartet No. 2.*
Reprinted from David Schiff, *The Music of Elliott Carter.*
2nd ed. Ithaca, NY: Cornell Univ. Press, 1998.

Instrument	***Intervals***	***Rhythmic type***	***Expressive character***
Violin I	m3, P5, M9, M10	free	bravura
Violin II	M3, M6, M7	pulse	laconic
Viola	aug4, m7, m9	*rubato*	*espressivo*
Cello	P4, m6, m10	*accel.-ritard.*	impetuous

The four parts are designed as "archetypical" musicians. Carter is quoted as stating the following: "The first violin is a virtuoso, interested mainly in showing off, the viola is a bit too-consistently doleful, the cello self-indulgently romantic; the second violin [the only part not to have its own cadenza] like a composer tries to create order among its narcissistic neighbours."[14] This can be seen at the beginning of the Quartet as the individual instruments begin to reveal their character patterns.

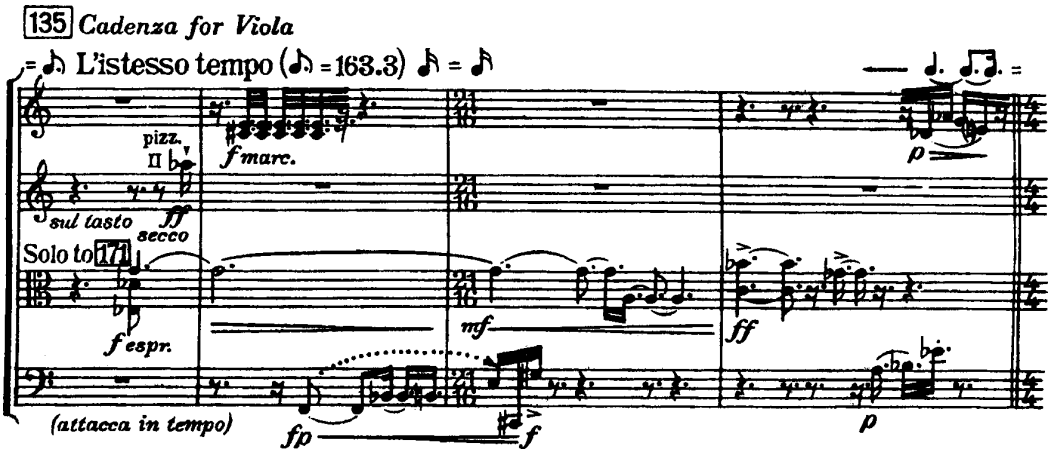
Overall, the work is organized into four movements separated by cadenzas for viola, cello, and violin I, respectively. An introduction and conclusion frame these sections. The parts do not share material until the fourth movement. The Introduction does, in fact, introduce the characters to the audience. The first movement, *Allegro fantastico*, then begins in m. 35 with a virtuosic display by the first violin. (See Figure 2.)

Figure 2. First six measures of *String Quartet No. 2*, movement I.



The exploration of the violin's individuality continues throughout this movement, with swift dynamic switches and wide-ranging articulations. There is evidence of some sense of simultaneity of experience with other parts, albeit very little. The emergence of the viola solo begins in m. 117, eighteen measures before the official start of the cadenza. When the cadenza does officially begin in m. 135, it seems as if the other musicians do not take much notice of this fact. And, try as they might, never really clear the way for a solo cadenza for the viola. (See Figure 3.) These characters explore the reaches of their individuality through their interactions with the other instrumentalists. Although there are moments where similar dynamics and note values coincide, it seems that the parts are reacting to a common experience rather than acting together out of a united sense of purpose.

Figure 3. Elliott Carter's *String Quartet No. 2*, movement I, Cadenza for Viola.



Prehension

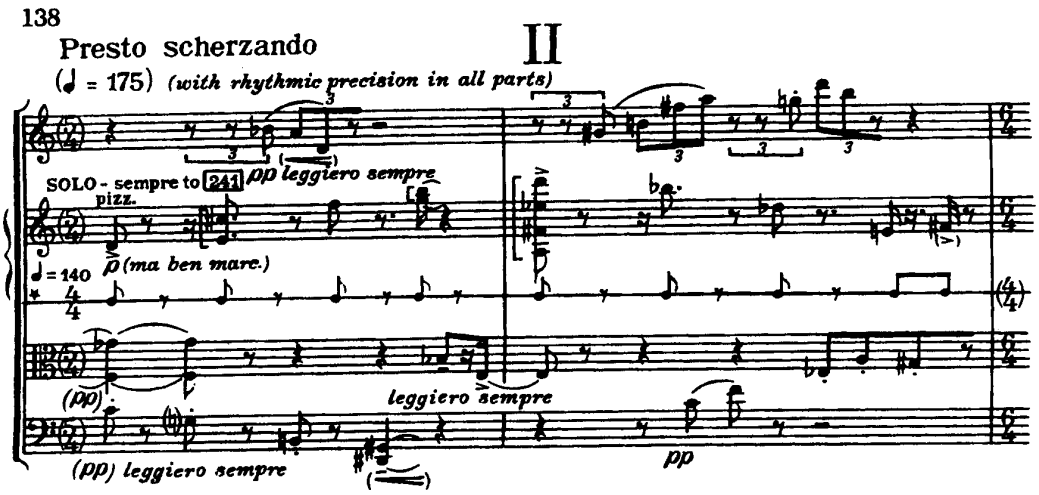
How do "actual entities" coalesce? The manner in which sensations and perceptions (defined as the actual entity) coalesce into an experience is what Whitehead calls a "prehension."

The word "prehension" is derived from the Latin *prehendere,* which means to seize or grasp. He uses this term on the basis of the following logic: As we experience something, we are constantly perceiving and incorporating new data along the continuum of our very recent past to construct our present awareness. This is the constant becoming of what we call *now*. In this moment I am using the knowledge learned about this topic in the past to communicate an idea. This is now your present as well. There is, then, concrescence of experiential existence through this prehension.

Rashvihary Das elaborates on the concept of prehension. He revisits a comparison between Whitehead's views on prehensions as the central object of existence with Newton's belief that physical objects exist separately from the objective perception of time. "For Newton, absolute durations of time and absolute places were actual things. They were real by themselves."[15] As Newton has fixity of space and order of events, Whitehead has 'actual entities' in various states of existence (or perception), since "actual entities" do not experience all data at the same rate. If we are defined by what we prehend, and our prehensions are experienced individually, no one else on the planet (and nothing else) is having exactly the same experience at the same time. (There would be a great deal of similarity at times, but the fact remains that no experience is identical to another experience.) Our reactions in response to what we have prehended then inform our decisions in the current moment, leading us to have new, different, and continually distinct experiences of growing closer and further away from other entities. My existence as a writer, for example, does not make sense or have validity without your existence as a reader.

The Quartet's second movement exemplifies this growing closer and further away as a process of understanding oneself while incorporating aspects of the reality of other entities. This movement showcases the second violin in the role of time-keeper/peace-maker, showcasing the second violin's specific rhythmic character pattern. (See Figure 4.)

Figure 4. Elliott Carter's *String Quartet No. 2,* movement II, Violin II solo.



Note the use of characteristic intervals in all parts as well. There is little semblance of agreement within or between the parts until measure 215, where there is brief agreement, lasting through measure 226. (See Figure 5.) In m. 243 the cadenza for cello begins. However, here too we find that the cadenza is not a true cadenza in that the other players are not tacit nor does the part as written show off the virtuosic capabilities of the instrument throughout this section. Rather, the dynamic marking here is, for the most part, *piano* and it is almost as if the musical sentences are incomplete as well. (See Figure 6.)

Figure 5. Similarity in dynamics, use of double stops, and note values in Violin I, Viola, and Cello parts. *String Quartet No. 2,* movement II.

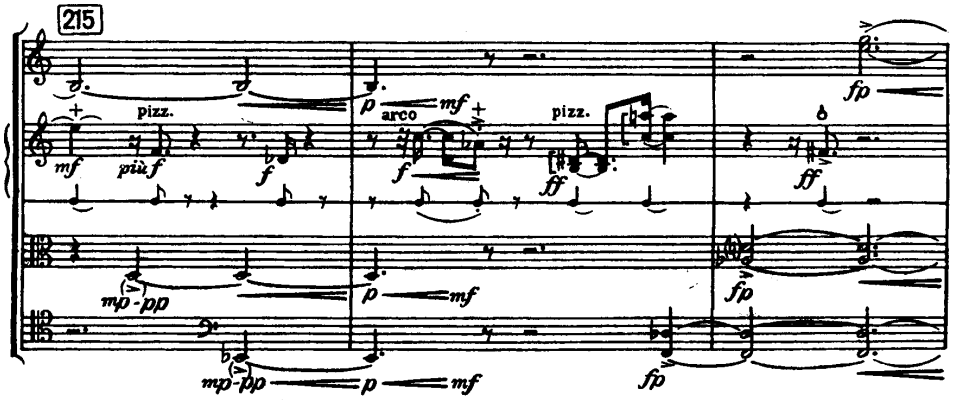
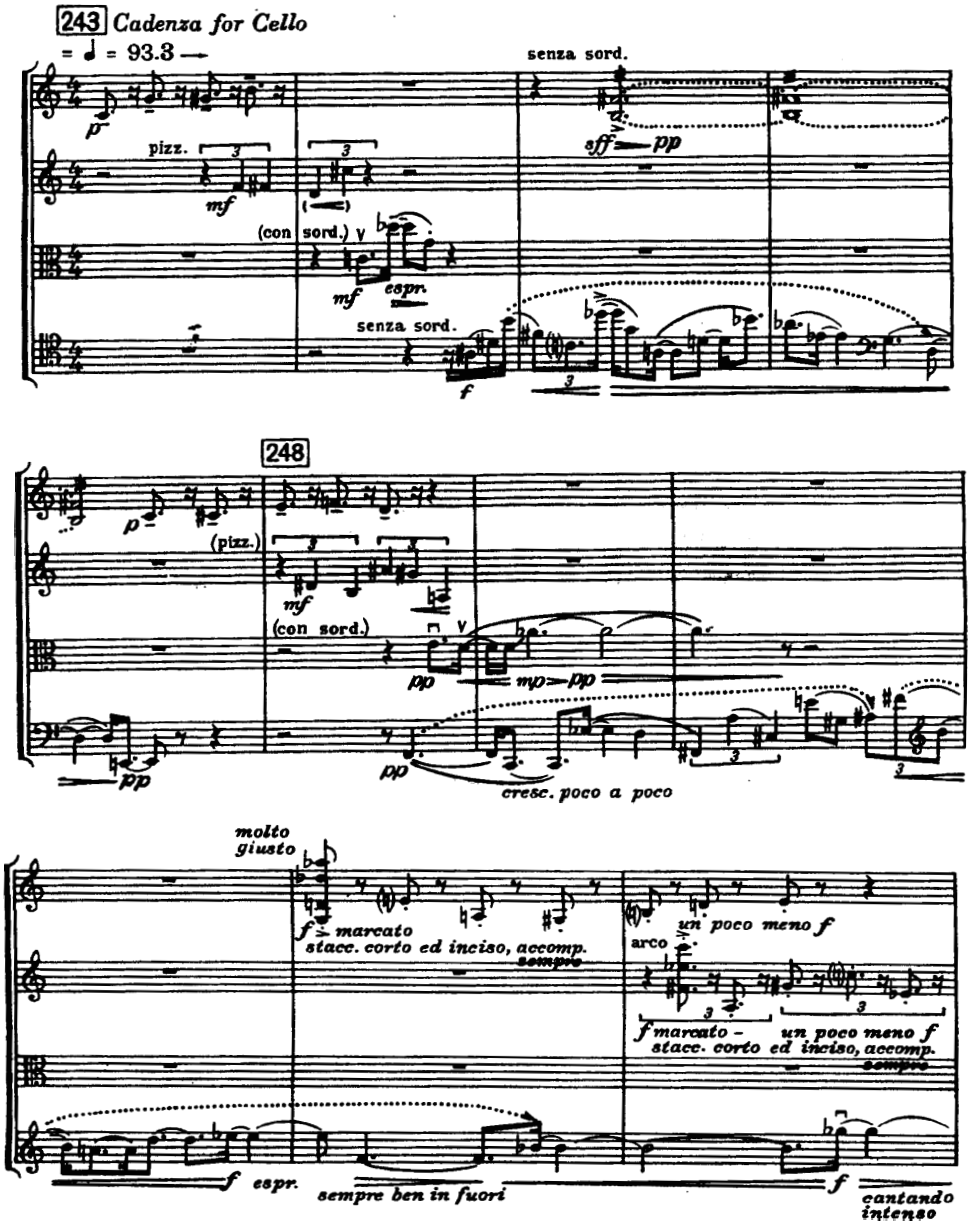
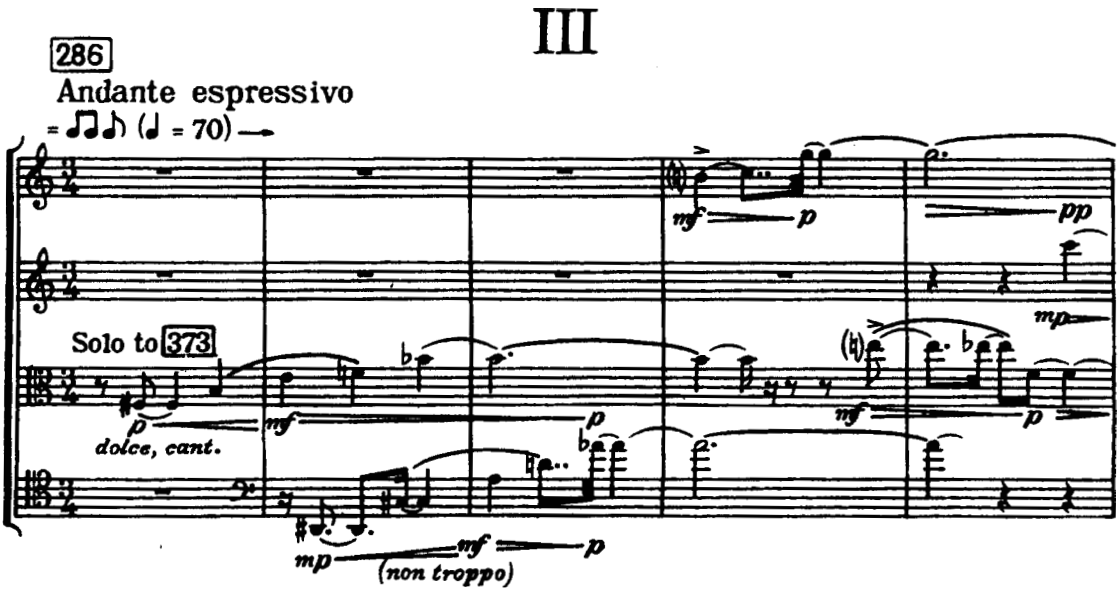


Figure 6. During the Cadenza for Cello, the remaining parts cooperate only in that they have similar material. Entrances in Violin I and II. In measures 252–253, especially, interrupt the Cello lines.



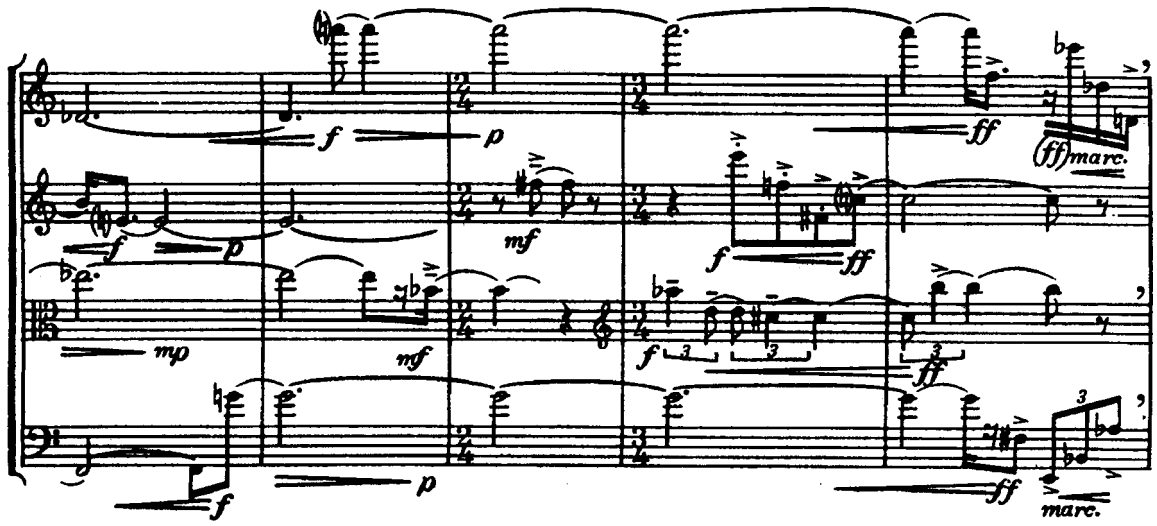
The third movement opens with a viola solo in measure 286. Note that the designation is 'Solo to m. 373.' Throughout the solo, the other parts do not entirely respect the solo, nor does the viola insist on being heard above the other instruments. (See Figure 7.)

Figure 7. Stylistic imitation of Viola solo by Cello line; measures 286–290.



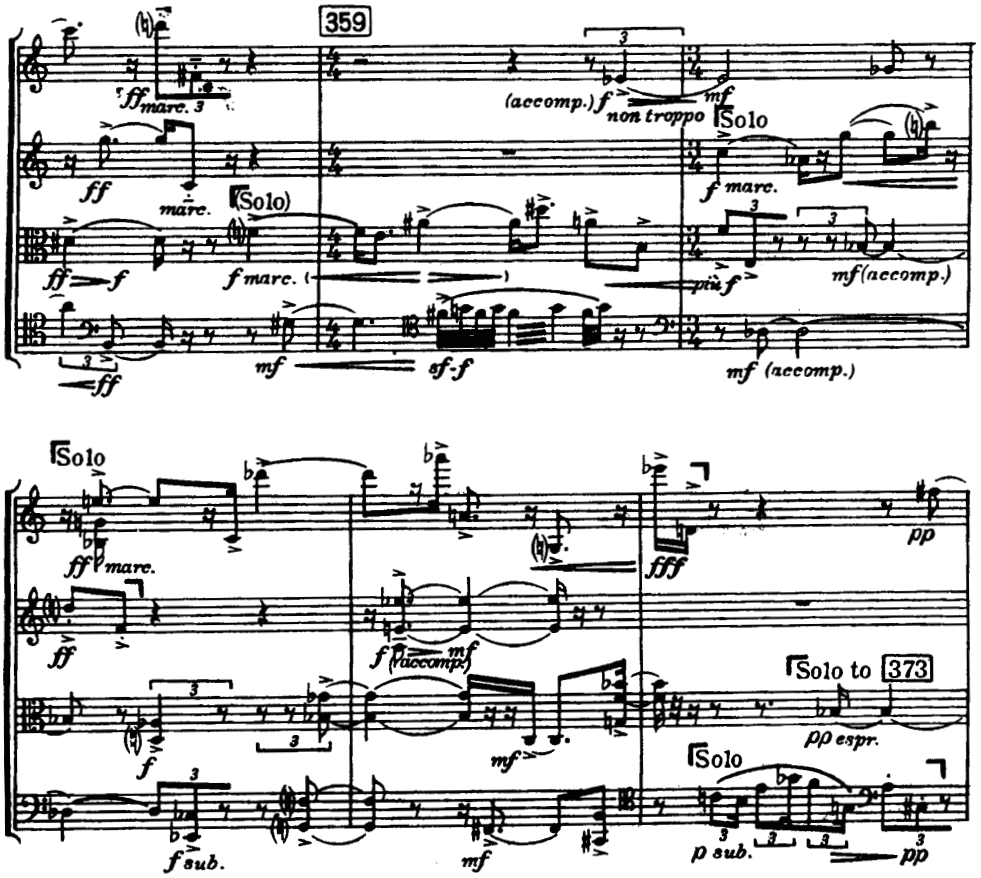
In measure 314, in the midst of the continuation of the Viola solo, there is a large interruption by the Violin I and II and Cello. The dynamic level seems more confrontational than cooperative or supportive of the violist's solo. At the same time, it does appear as if the characters are beginning to react to the other parts, rather than simply announcing their individual patterns in a completely self-centered manner. (See Figure 8.)

Figure 8. Measures 311–315. In measure 314, there is an interruption of the Viola solo by the Violin II part.



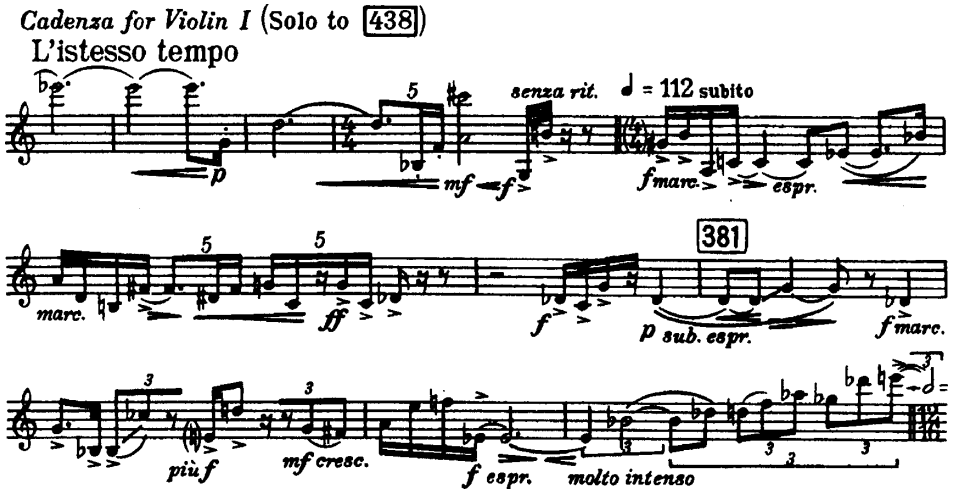
In Figure 9, one can see designations for solos in the first and second violin. This is still while the viola cadenza/solo is in effect. In measure 363 especially, the cello competes with the viola, here both parts are marked 'solo.'

Figure 9. During the Viola solo, interruptions and simultaneous solos with all three other parts exist.



The concluding material of the third movement contains the violin cadenza, which begins in m. 374 and ends in measure 421 and is the only truly solo cadenza in the piece. (See Figure 10.) Typical of a violin part, it is quite virtuosic and none of the other instruments play during this section until nine measures before the start of the fourth movement. (Even then, the entrances are quite soft and of a timid nature.)

Figure 10. Cadenza for Violin, at the end of the third movement.



Concrescence

The objective world presents us with the data we use to make decisions and evaluate our position in it, and Whitehead believes that our perception of these data is a fusion of two distinct types of observation. The first is the "mode of presentational immediacy." This presents the contemporary world to us through its relation to the physicality of our being. These are sensations or feelings that we inherit through bodily experience or awareness of sensation. The second, and often of more importance, is perception "in the mode of causal efficacy." This is the way we experience objects as distinct from sense perceptions. Observing the fact that there is a chair in the room has nothing to do with sensory perception.

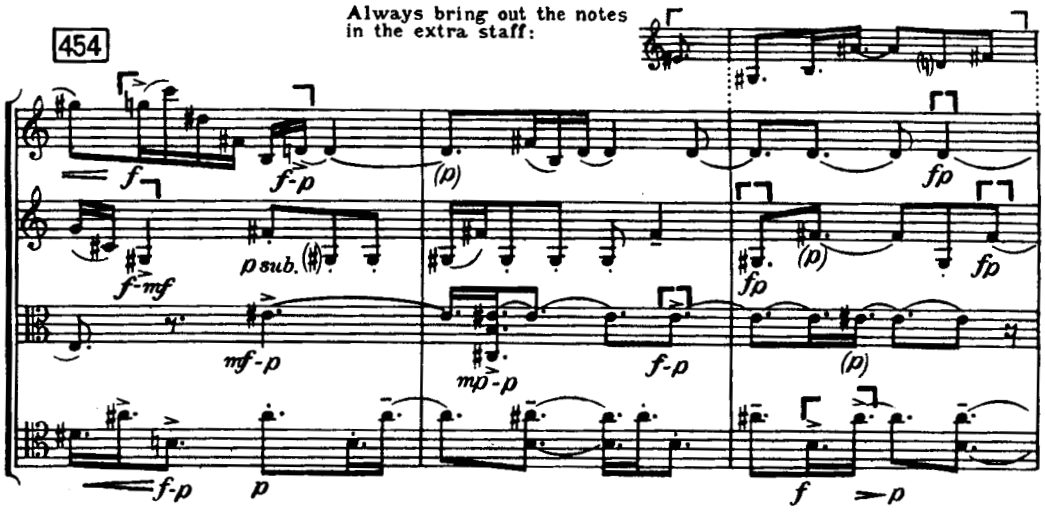
There are two types of "prehension." This initial type of prehension emerges as a single series of occasions when lined up consecutively over time because the process is individual and internal. In a thin slice of the present moment, for example, one prehends that, while in the middle of a sentence, one must continue speaking. In other words, we are taking the data we receive from our immediate past to construct our present. The second type is a multi-dimensional seriality of occasions, as we move outward to include more actual entities in each observation.[16] After reading this article or listening to a performance of a new work, that information will become part of your experience and will inform future decisions (such as whether or not to listen or read more).

When a span of actual occasions are considered as a large or multi-dimensional group, the prehension of sequences, transitions and successive instants becomes the personal identity of an individual or part of the identity of a group of individuals – in other words, a life. A "society" of actual occasions is a life. Here the term society is used simply as a way to denote a group, held together simply by proximity and, as such, shared experiences. (One can make this connection because of the shared similarities between members of the society.) According to Whitehead, "members of a society are alike because, by reason of their common character, they impose on other members of the society the conditions which lead to that likeness."[17] The likeness within a society develops over time, with increasing or decreasing concrescence between members of the society as relations become more or less intertwined through interactions of "actual entities."

The continuous prehension of data during moments of experience concresces relationships between and among people, creating a society. As a society, the members are interdependent and the existence of any particular society is entirely dependent on the membership. There is a membership because they have formed relationships over time and therefore project their future possibilities as vectors outward from their current prehensions.

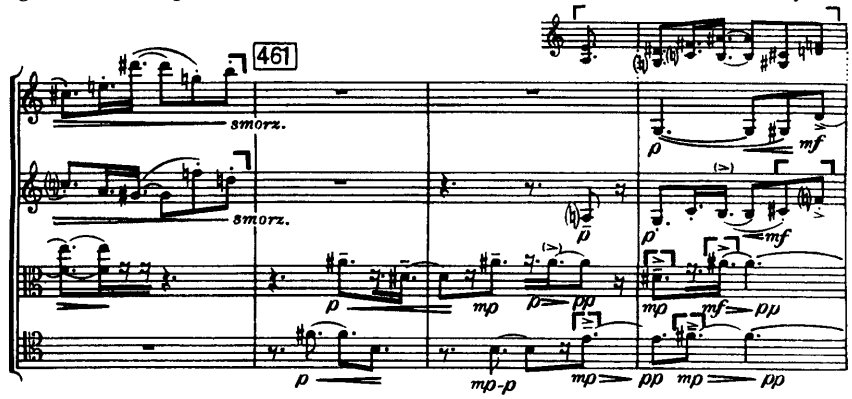
Returning to the String Quartet, the fourth movement shows evidence of shared material between the previously distinct character patterns, especially regarding specific intervals. This shared material begins through motives realizable only through the contribution of each instrument. (See Figure 11.)

Figure 11. Incorporation of shared characteristic intervals between all four parts.



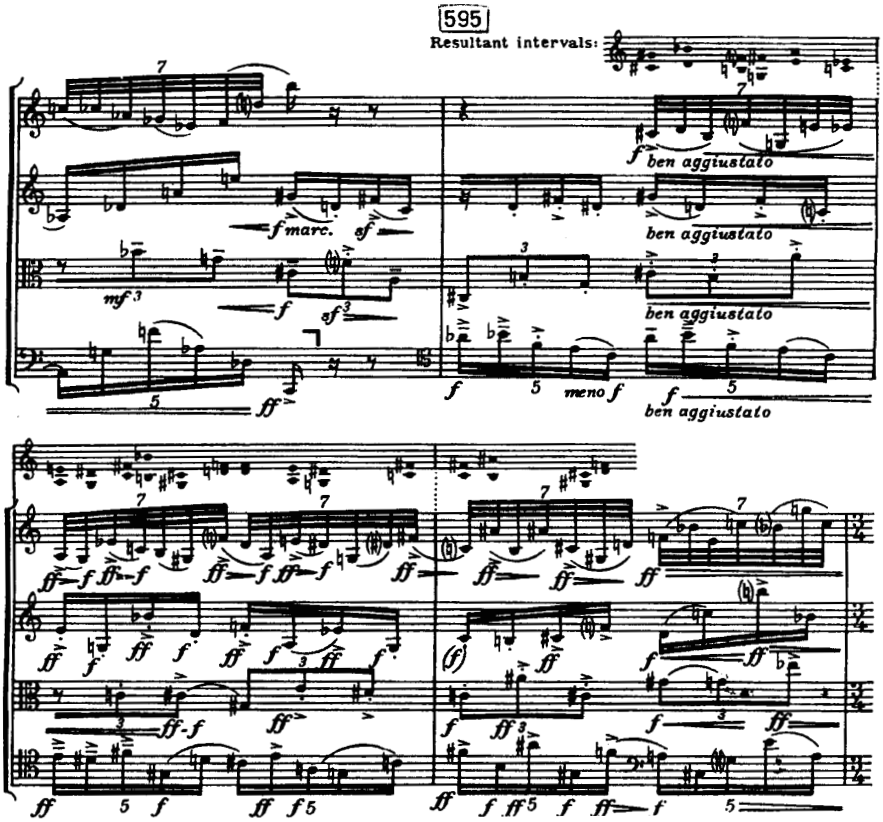
In m. 456 we see the G# in the second violin, the B and A# (a characteristic interval of the second violin) in the cello, D in the first violin, and F# in the second violin. It is also interesting to note that as intervals are used as motivic material, character-patterns are shared between parts. In measure 461, the P5 interval indicated by a4 and e4 in the violin II and cello was originally a characteristic interval assigned to Violin I. The aug5 interval on beat one of m. 461 is characteristic of the cello (m6), yet here it is created by the g3 and d#4 of the three other parts. (See Figure 12.)

Figure 12. Incorporation of shared characteristic intervals simultaneously between parts.



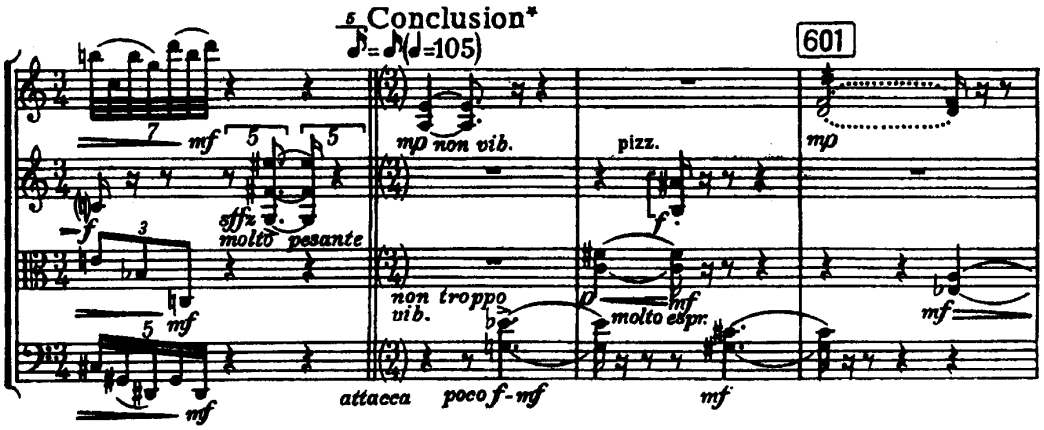
In other words, the whole is greater than the sum of the parts. The individual parts, originally quite diverse and in opposition to each other, have now concresced to the point of simultaneous activity. In a final statement of simultaneity, intervals (originally ascribed to individual parts) have become in m. 595–597 organically connected to each other. In Figure 13 we see that the first interval, P5, is shared between all parts although it was originally ascribed to the first violin. The Quartet has become like an organism, where one part cannot be separated or extracted from the rest without the whole and each individual being affected.

Figure 13. Characteristic intervals interconnected among all parts.



After this climax, the conclusion begins (m. 600). Note that throughout the conclusion "all the notes of Violin II end motives whose other note or notes are heard in another part." This is further evidence of concrescence. (See Figure 14.)

Figure 14. The note at the beginning of the Conclusion states, "all the notes of Violin II end motives whose other note or notes are heard in another part." Here the individual voices have found concrescence to the point where phrases are not complete until there has been some sharing or simultaneity between at least two parts.



In the final bars, the individual character patterns are eventually restated in a similar manner as in the introduction and the piece ends in nearly the same way as it began.

Conclusion

To summarize, Whitehead's Philosophy of Organism is made up of individual occasions, "actual entities," that exist in relation to themselves in time (through prehension of past events and future possibilities) and each other by perception of sensory and observational data and degree of concrescence.

By incorporating aspects of personification and characterization of individual musical parts in his *String Quartet No. 2*, Carter created an environment where individual characters do not sacrifice any part of their individuality for the greater whole and yet work toward agreement through conflict. At the same time the work is able to achieve an overall beauty and synthesis of sound that had not been realized previously through the medium of string quartet writing. The piece is a journey where the performers and audience members have experienced a real drama between four protagonists by the end.

I began this research simply because my initial exploration into Carter's music was a difficult experience for me. How is it that these pieces have won such honors and prizes? I found that the answer in making sense of the musical material began with understanding the extra-musical influences, in addition to understanding theoretical concepts behind Carter's compositional technique. The key to making sense of the whole necessitates understanding the individual parts and lines of musical activity by instrument or group while simultaneously listening to the overarching impact of the total sound and the way in which the individual lines meld and become intertwined. It is this communication between the voices where one notices and understands their differences, unique characters, emotional qualities, strengths, fears, and aspirations and it is incumbent upon the listener to find an approach to understanding Carter's music. Listening to the quartet with this information has contributed to a deeper appreciation of the music and I hope will enable other students of Carter's music. It is this kind of curiosity, which Carter finds himself imagining to exist in the audiences for which he writes his music: "the curiosity to find out what is new, to assess it, and to try to come to terms with it."[18]

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Notes

[1] Schiff, 11–12.
[2] Hosinski, 3.
[3] Hosinski, 3.
[4] Hosinski, 2.
[5] Hosinski, 2.
[6] Hosinski, 10–11.
[7] Hosinski, 27.
[8] Hosinski, 46.
[9] Hosinski, 20. Quoted from *Process and Reality*.
[10] Hosinski, 21.
[11] Hosinski, 20–21.
[12] Schiff, 36.
[13] Schiff, 36.
[14] Find Source!
[15] Rashvihary Das, *The Philosophy of Whitehead.* Ann Arbor, MI: University Microfilms, 1959, 81.
[16] Hosinski, 65.
[17] Hosinski, 132.
[18] Carter, *Essays and Lectures,* 318.

Santrauka

Laiko ir vaizdinių suvokimas muzikoje

Elliotto Carterio, vieno produktyviausių Amerikos grynosios muzikos autorių, kūryba apima didesnę šimtmečio dalį. Jo kūriniai su būdinga poliintervaline akordika, daugiaformėmis kompozicijomis, metrinėmis moduliacijomis ir instrumentinių grupių griežimu skirtingais tempais vienu metu, taip pat kūriniai, kuriuose panaudotos ir išryškintos atskirų instrumentų natūralios galimybės ir asmeninės atlikėjų savybės, iki šiol tebėra neišsenkamas novatoriško požiūrio į muzikos komponavimą šaltinis. Be grynai muzikinių įtakų, Carterio kūrybą veikė ir nemuzikiniai faktoriai, kurie turėjo reikšmės minėtų komponavimo technikų sukūrimui.

Remiantis Styginių kvartetu Nr. 2, šiame pranešime pristatomi novatoriškų koncepcijų sukūrimo ir pritaikymo filosofiniai bei literatūriniai pagrindai, aptariamas laiko faktoriaus panaudojimas. Pranešime paminėta A. Northo Whiteheado „organizmo filosofija“, keturios laiko filosofijos teorijos (H. Bergsono, P. Suvchinskio, Ch. Koechlino ir G. Brelet), iliustruotos J. Cocteau filme „Poeto kraujas“, ir personažo plėtojimo metodas, panašus į rašytojų J. Joyce'o ir E. Dickinson. Ši analizė atskleidžia unikalų E. Carterio požiūrį į komponavimą kaip holistinį kūrybinį procesą, muzikos teorijos ryšį su šiandienos poreikiais ir tikslais. Pati jo muzika sako, ką jam ir mums reiškia patirtis.

Rima Povilionienė

Influence of Mathematics on the Process of Music Composition in 20th Century

In this report I would like to overlook shortly the problem of interaction between mathematics and music, to investigate and show implications of mathematical elements in musical material. This problem runs in different forms of manifestation since Antiquity. The music I mention as a branch of science on purpose, since firstly I look at the *quadrivium* formed by the sciences in Antiquity; it means the music was alongside with and equivalent to other exact sciences, such as arithmetic, geometry and astronomy.

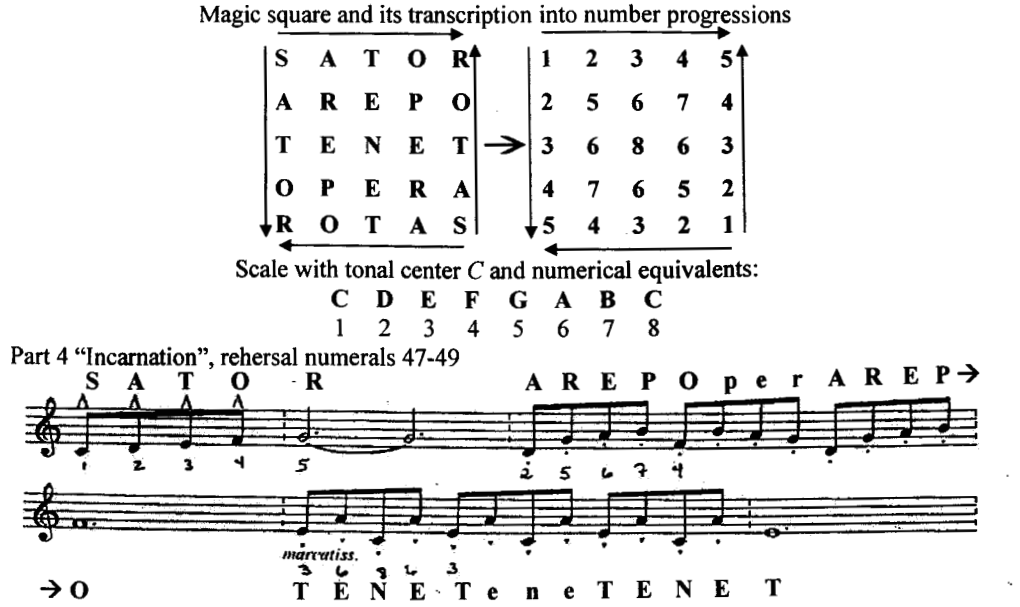
When nowadays talking about the structural and symbolic relation between the numerals and musical sound and their interaction in the process of composition, we may define cases of numeral expression, distinctive to particular period, and certain canons of numerological manipulations. For example, Pythagorean system of musical intervals and mathematical proportions mark the period of Antiquity. This system reflected an opinion that numerical proportions influence overall organization of the universe. It gained response in world-view of Renaissance, since this period "revitalized" the philosophy of Antiquity's beauty and its material expression, i.e. relations of proportions, expressed by mathematical symbols and incarnated in various fields of art, such as architecture, literature, fine arts and music. Typical musical example of this period is Guillaume Dufay's motet *Nuper Rosarum Flores*, which repeats the measurements of Florence Cathedral by its forms and proportions of rhythmical mensures. Mysticism of the Middle Ages determined sacralization of the culture itself and the music, thus gave the religious symbols prominence (including numbers, provided with symbolic meaning). Musical period of Baroque is characterized by eminently sacral tradition of Christian numerology, which reaches mystic world-view of the Middle Ages and based on it composing tradition (there, J. S. Bach's oeuvre is full of manipulations of mathematical calculations and symbolical codes, thus turning it into an example of chrestomathy). The proportions of form architectonic, representing Classicism, and widely perceptible "square, quadrate principle" showed harmony of mathematically balanced form elements. Stephanie Mason indicates the synonym of the music of 18th century was "resonant with mathematics" (Mason, Saffle, Schütz, 1988: 790), still Romanticism, that followed the Age of Enlightment, differed by eminently blossomed anti-rationalism ("mind can be wrong, but feeling – never"); Yuri Cholopov notices the culmination of antagonism between mathematics and music during this period (Холопов, 1982: 78).

It could be stated that music was believed to be an object of science in the beginning of 20th century. For example, Igor Stravinsky stated, "The particularity of a musician's intellection differs few from mathematical intellection". So here we try to analyze what forms are used for the expression of interaction between mathematics and music in the frames of modern music compositions; how the compositional numerological experience of previous epochs is synthesized in music of 20th century.

It is to be noticed that expression of numerical composition possibilities in the music of 20th century synthesizes all previous periods. But interactions between art of sounds and number construct become eminently miscellaneous and coexist as complex layer of different numerological traditions: the music of 20th century is full of numerological symbolism of various religions; here you may find harmony proportions of the universe, Sectio aurea rules of numerical progressions (Fibonacci) and confrontation of symmetry and asymmetry in levels of polyrhythmic and polymetrics.

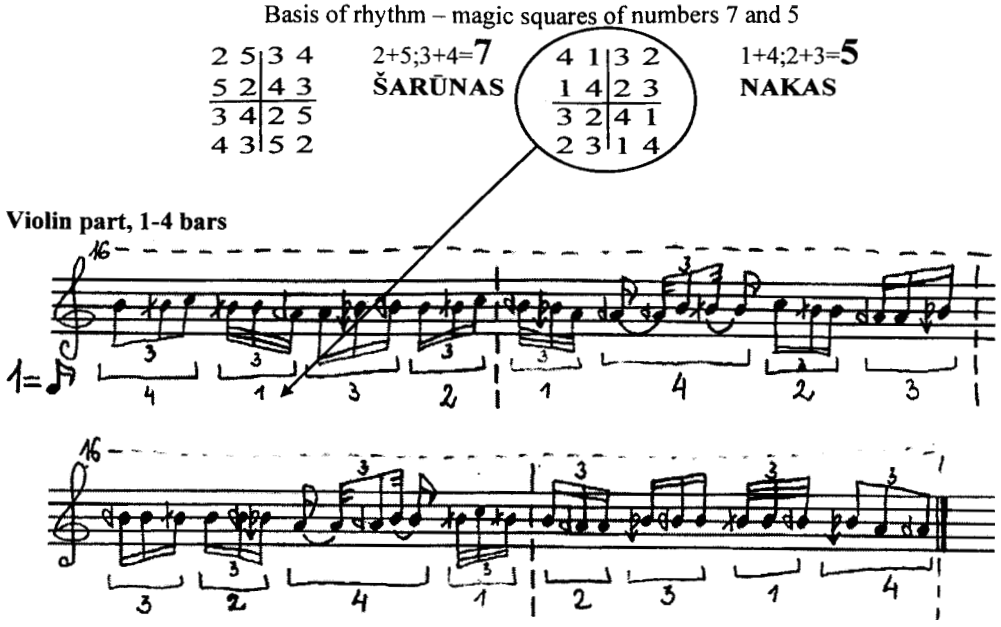
For example, the **principles** of number magic of the Middle Ages dictated composing process in John Tavener's *The Protecting Veil* (1987) for violoncello and orchestra. After Marianne Tatom a fragment of score from an example shows how tone scale for violoncello part is constructed according to the logic of magic numbers square (Tatom, 2000: 7) (Example 1).

Example 1. Magic square ciphers and a section from John Tavener's *The Protecting Veil* (1987), part 4, Cello melody.



Influence of number squares's logic is observed in course of Lithuanian composer Šarūnas Nakas' composition *Ziqquratu* (1998). Here the law of square of two numbers (5 and 7) determined the organization of rhythmic parameter, whereas ziggurats (stepped pyramids) allegorized by graphical schemes dictated the tone scale of a composition. Incidentally, the composer personified the cabbalistic numerical manipulations, because you may see a cryptographic interaction between magic squares chosen and composers name: the sum of letters is equivalent to numbers 5 and 7 (ŠARŪNAS = 7 and NAKAS = 5). Another example shows the influence of magic square to the rhythm of violin part (Example 2).

Example 2. Magic squares of numbers 7 and 5 and examples from Sarunas Nakas' *Ziqquratu* (1998): Violin part's rhythm and magic square of 5.



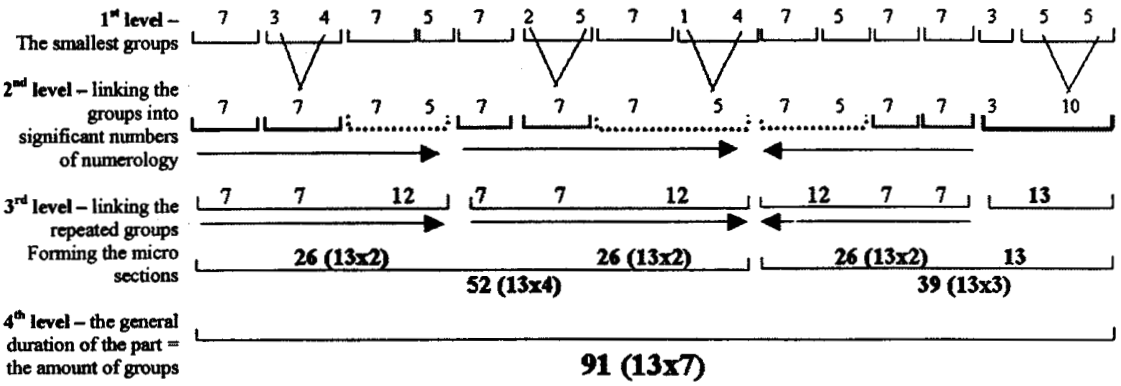
A numerological symbolism with eminently wide expression is found in the music of 20th century. There are separate cases to be mentioned about the introduction of Christian numerology into the musical production. For example, Olivier Messiaen's constructive piano cycle *Vingt Regards sur l'Enfant-Jésus* (1994) is based on sacral topic, composition *La Transfiguration de Notre Seigneur Jésus-Christ* (1965–9) gives symbol of seven prominence, opus *Couleurs de la Cité céleste* (1963) is encoded with numeric symbolism of Revelation book. A symbol of cross is exalted in Sophia Gubaidulina's composition *In croce* (1979), and mystic of number seven in music piece *Семь слов* (1982). Annette Veit states to envisage numeric symbols of the Bible in these scores: Arnold Schönberg's *Jakobsleiter* and Paul Hindemith's *Psalmensymphonie* (Veit, 1991: 77).

The spirit of Bible is prompted by numerical ciphers, found in Lithuanian composer Bronius Kutavičius' tetralogy *Jeruzalės vartai* (1991–1995). Another Kutavičius' composition – Second string quartet *Anno cum tettigonia* (*A year with grasshopper*, 1980) shows rehabilitation of symbols of cosmologic universe organization, that are related to phenomenon of seasons, in the matter of music: four seasons are symbolized by tone scale of organ part, run in a phonogram, overall twelve tones used in the composition or twelve beats of a bell match the number of months in a year, the rhythmic picture is determined by 7 days of a week, whereas the sum of composition bars equals to 365 days in a year.

Lithuanian composer Snieguolė Dikčiūtė in her composition *Septynių tiltų misterija* (*Mystery of seven bridges*, 1991) combined Christian and Pagan traditions through the prism of numerical symbol approach. Religious symbols are encoded in the name already – a bridge as a link between two worlds and eminently sacral Christian symbol – number 7, whereas the combination of these two elements is detected in Lithuanian folklore also. Thus the mentioned above number on purpose became a factor of composition structure, tone scale and rhythm.

Numeric allegories in music of 20th century manifest in individualized shape. For example, well known Alban Berg's *Concert for violin* (1935); the interpretation of numbers, found in its score is associated to dedication to "dead angel" – girl Alma Mahler. Imprint of number symbolism is mentioned in George Crumb's compositions *Makrokosmos I* (1972) and string quartet *Black Angels* (1970). The latter composition marked the end of war in Vietnam, so it was sensed with numerical ciphers in musical score: pitch, duration, relation between the parts, amount of instruments and other parameters were determined by two significant symbols – numbers 7 and 13. Composer used these numbers for creation of numerological plan of the composition – Program. For example, a manipulation with these numbers manifested after the analysis of rhythmic picture from the first part of quartet (Example 3).

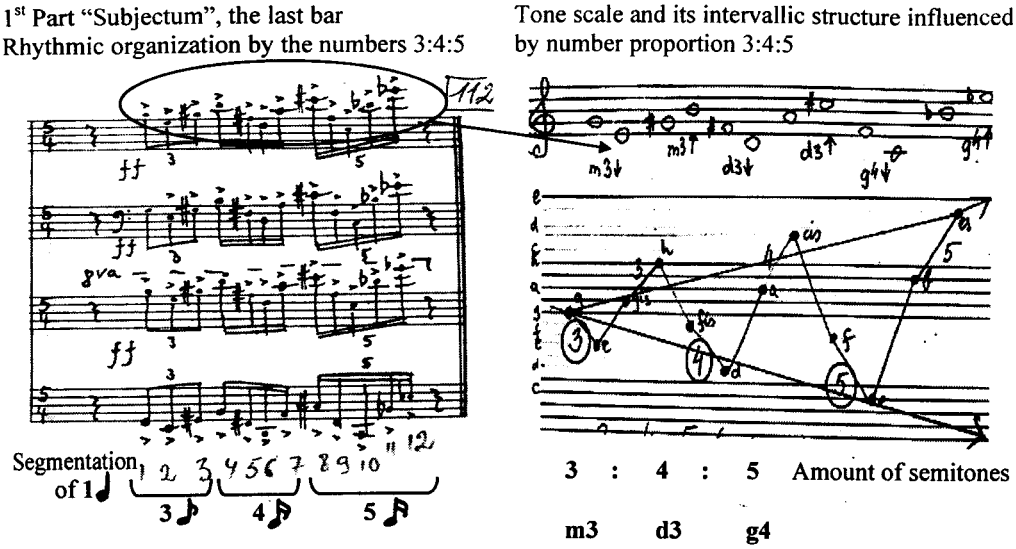
Example 3. The plan of rhythm in George Crumb's *Black Angels* (1970).
1st Part "Threnody I: Night of the Electric Insects", combining the particular five note groups.



After detailed investigation of John Cage's *Ryoanji* (1983–5) it was observed that composer encoded numerical symbols of famous Japanese garden of sand and stones in the part for percussions and the sheet of score interpreted as a visual garden plane.

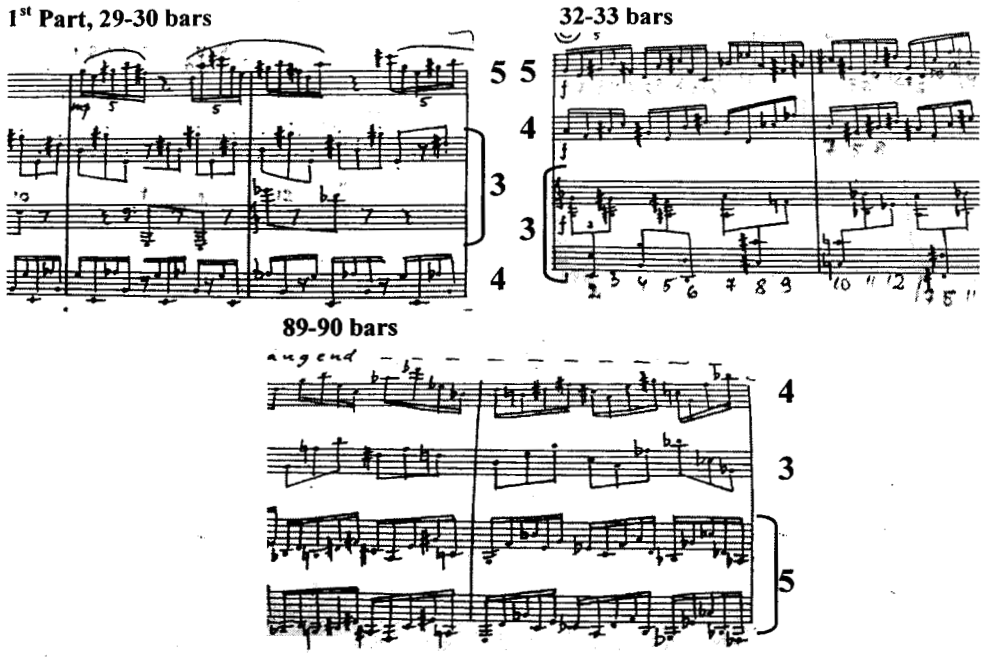
A number in the musical composition of 20th century functions in shape of various **numerical proportions or progressions**. For example, an influence of arithmetical proportion, expressed by a formula 1:2:3, is identified in Steve Reich's composition *Clapping Music*, whereas reference of rate in *Music for pieces of wood* was determined by ratios of harmonic proportions 3:4:6. There, three numerical formulas 5:4:3, 1:1 ir 1:2:3 are noted in the titles of Sigfried Thiele's three partcomposition for oboe, violoncello and piano *Proportionen* (1971); those formulas determine grouping of beats and instrumentation. In the following example you may see the segments of scores, where grouping of rhythmic values determined by formula of numbers is shown (Example 4).

Example 4. Extension of number proportion 3:4:5 in the 1st Part of Sigfried Thiele's *Proportionen* (1971).



For example, in the final bar (bar 112) of the first part "Subjectum" with the numerical insertion 5:4:3 a succession of 12 tone series is "sheathed" into the rhythmic cloth, determined by the mentioned above proportion retrograde 3:4:5. As you can see, these numbers also determined the intervallic structure of tone series. Furthermore, S. Thiele organizes polyrhythmic episodes of composition on the basis of this numeric formula (Example 5).

Example 5. Polyrhythmic episodes in Sigfried Thiele's *Proportionen* (1971), formula's 5:4:3 variants.



At this point I would like to mention Conlon Nancarrow's *Studies for player piano*, where the use of polymetrics and polyrhythmic could be characterized as whole encyclopedia. The composer often invoked even very complicated mathematical ratios in order to implement them into the production. For example, *Study* No. 27 called "Canon 5%-6%-8%-11%", irrational and transcendental expressions of numbers are detected in *Studies* No. 33 and No. 40. In the *Study* No. 37, which is composed as a canon, the composer wrote tempos of 12 voices in ratios of numbers, that are shown in the example: 150-160$^{5}/_{7}$-168¾-180-187$^{1}/_{2}$-200-210-225-240-250-262$^{1}/_{2}$-281$^{1}/_{4}$. Kyle Gann characterizes the last *Study* as one of the most wonderful expression of rate process in the music of 20th century (Gann, 1995: 193). It is known, that Nancarrow was eminently concerned about Henry Cowel's tractate *New Musical resources* (1930, it is stated, that the walls of Nancarrow's studio were patterned with Cowell's schemes, diagrams and charts for a long time) (Gann, 1995: 194), in mentioned above tractate, therefore, you may find the beginning of this number sequence: this is an equivalence of numerical relations of chromatic 12 tone scale (Example 6).

Example 6. Polyrhythmics in *Studies for player piano* by Conlon Nancarrow influenced by complicated mathematical proportions.

Study for player piano N. 27 "Canon 5%-6%-8%-11%"

Study for player piano N. 33 "Canon $\frac{\sqrt{2}}{2}$" *Study for player piano* N. 40a "Canon $\frac{e}{\pi}$"

Study for player piano N. 37 proportions of tempo of twelve voices

150 - 160$^{5}/_{7}$ - 168¾ - 180 - 187$^{1}/_{2}$ - 200 - 210 - 225 - 240 - 250 - 262$^{1}/_{2}$ - 281$^{1}/_{4}$

and equivalents to well tempered chromatic scale in :

281$^{1}/_{4}$		**15:8**	**si**	**B**
262$^{1}/_{2}$		**7:4**	**si**	**B flat**
250		**5:3**	**la**	**A**
240		**8:5**	**la**	**A flat**
225		**3:2**	**sol**	**G**
210	when 150:1	**7:5**	**fa#**	**F sharp**
200		**4:3**	**fa**	**F**
187$^{1}/_{2}$		**5:4**	**mi**	**E**
180		**6:5**	**mi**	**E flat**
168¾		**9:8**	**re**	**D**
160$^{5}/_{7}$		**15:14**	**do#**	**C sharp**
150		**1:1**	**do**	**C**

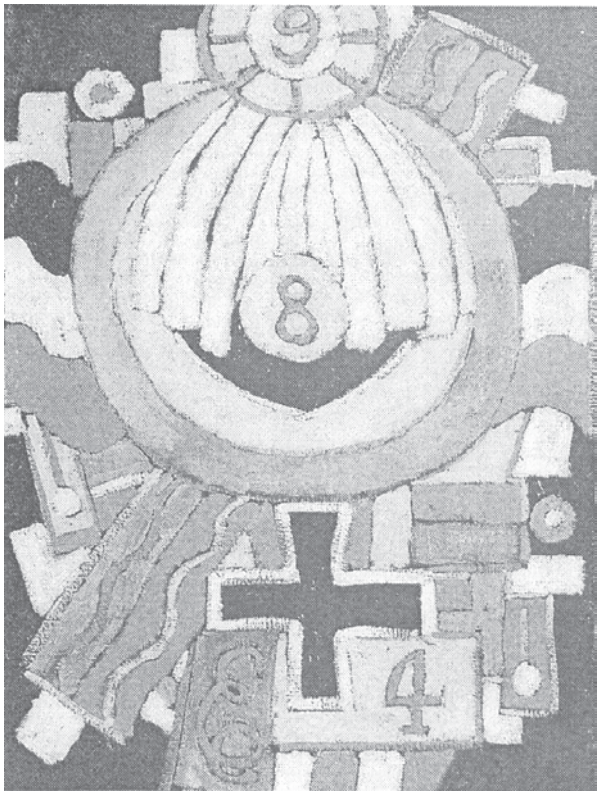
There, even György Ligeti, when composing the illusion of chaos in the first etude for piano *Désordre* (1985), chose polymetrics as a composing instrument in order to obtain parallel between symmetry and asymmetry. Morton Feldman, when creating an impression of a "violated" symmetry in his composition *Crippled symmetry* (1983) supplied one more version of symmetry phenomenon. John Cage composed *First Construction* structure with the aid of symmetrically set sequence of numbers 4-3-2-3-4. Likewise musicologist Gražina Daunoravičienė observed that Lithuanian composer Osvaldas Balakauskas has used in his *Second symphony* symmetrical sequences of numbers from 2 to 9 and backwards (together with another series 5-3-2-3-5) that influenced the rhythmic organization, segmentation of form into parts and composition of tone series.

If we talk about response of **numerical progressions** in the music, firstly we think about Fibonacci's phenomenon of number sequence that was expressed in the compositions of 20th century music in eminently various shapes. Belos Bartók's oeuvre is referred as a chrestomatic example of this phenomenon (for example, Erno Lendvai, who investigated the groups of sounds in organization of composition *Allegro barbaro*, 1911, states to have established the Fibonacci sequence). This numerical sequence intrigued Sophia Gubaidulina in her composition *Слышу... Умолкло...* (1986) – 1st, 3rd, 5th and 7th part meter crotchets are written in Fibonacci numbers 144-89-55-34. The metric organization in Karlheinz Stockhausen's *Klavierstück IX* (1961) is based upon the Fibonacci numbers; furthermore, group proportions in the play of this composer *Zyklus* (1959) are settled according to the numbers 1, 2, 3, 5, 8. Fibonacci progression is used in György Ligeti's play for harpsichord *Continuum* (1968) in the level of length parameter, whereas Cristobal Halffter dedicated to this phenomenon a composition for orchestra *Fibonaciana* (1969).

We may state, that when using number series an individualized position of contemporary composers manifests also. For example, musical matter is constructed according to the composers' generated numerical series in Luigi Dallapiccola's play *Colore*. Analogically Lithuanian composer Remigijus Merkelys in his productions used progressions of numbers deduced himself; those were supported by prime numbers.

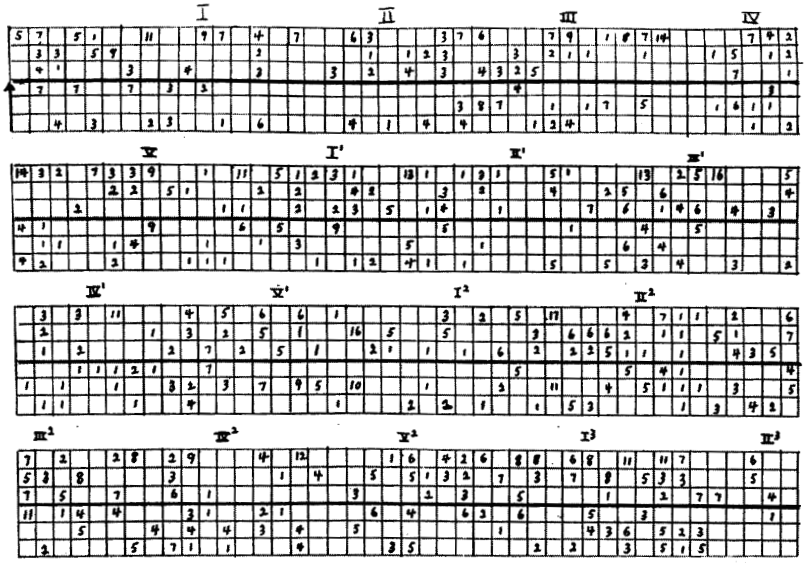
But alongside the phenomena that synthesize traditions of numerological music composition distinctive to earlier epochs, a new music mathematization tendency points out in the compositional practice of 20th century music also. This practice is interconnected with manifestations of **modern mathematic theories**. Also it is noticed an application of alternative scientific and mathematical terminology to compositional processes of music of 20th century. For example, Christine Burns notes the terms "system" and "mapping" used by composers Milton Babbit, Otto Laske and Barry Truax (Burns, 1994: 3).

As we talk about implications of mathematics in the world of contemporary music, analogous phenomenon in other arts and sciences is observed too. In the first part of 20th century a trend of **structuralism**, which has disgorged into various humanitarian spheres – philosophy, psychology, linguistics, anthropology and so on, shows up. An example shows that creators choose a number as a theme for paintings or an object of image. For instance the elements of portrait consist not only of graphical symbols but also of numbers in the painting by Marsden Hartley. The second example is taken from artist Paul Klee's cycle of paintings that are unified by an idea representing the particular numbers. As well the artwork by Jasper Johns fixates the perspective conception of computer images where we may penetrate several versions at one time (Example 7).



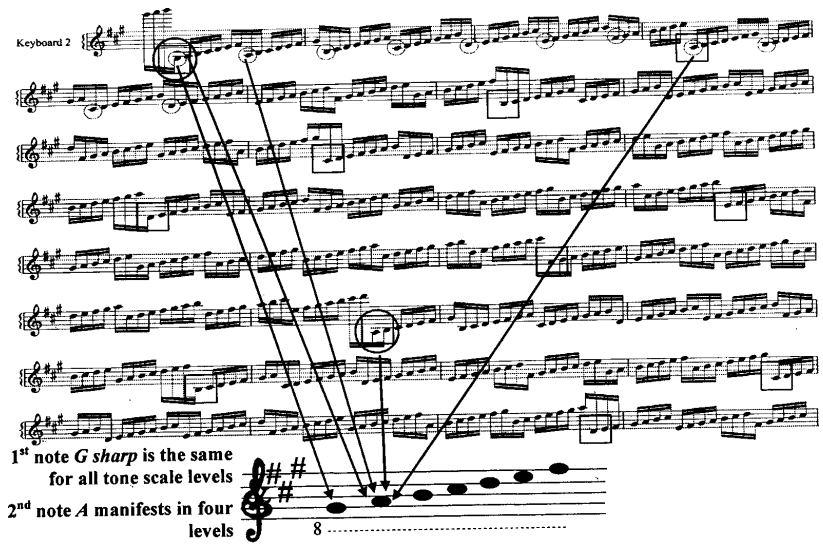
Example 7. Numerals in the fine arts.
Marsden Hartley's *Portrait* (1914). Illustration from *Magie der Zahl in der Kunst des 20. Jahrhunderts*. Hrsg. von Karin v. Maur. Mit Beitr. von Ina Conzen. Ostfildern, 1997

Accordingly the structural elements of other arts and sciences disgorge into music of 20th century. It is evident an influence of structural linguistics to computer music because the algorithmic L-system (or Lindenmayer system) formulas based on the rules of formal grammar may be applied in the sphere of music composition. For instance, Kevin Jones analyses stochastic generative schemes and paradigms of Chomsky grammars that are used for composing music by computer (Jones, 1981). Charles Ames points out his piece *Crystals*, which he has composed applying mathematical modeling schemes based on Gestaltpsychology idea (Ames, 1982). One of the ways looking for music indetermination by John Cage he used astronomy science as a composing tool. The structure of *Atlas Eclipticalis* (1962) is based on astronomical charts: the notes were marked right on the spots of stars after laying the sheet of score onto star chart (Maurer, 1997: 2). The digital sequences of Earth magnetic field's fluctuations after converting them into sounds with the aid of computer were chosen as a base for audio material in *The Earth's Magnetic Field* (1970) by Charles Dodge (Alpern, 1995: 1). Morton Feldman offered an original decision of music composition's mathematization because he used numbers as notation symbols in several compositions. This composer was interested in the idea of music indeterminacy and in such scores he has marked only the quantity of tones and approximate tone pitch. The sketchbooks with digital notation are seen in such works as *IXION* (1958) and *Intersections II, III and IV* (1951–53) (Example 8).



Example 8. Numeral notation in Morton Feldman's *IXION* (1958). 1st page of score

Though the most complicated manifestation of mathematization in 20th century music compositions is influenced by implantation of modern mathematic theories. That for example an application of algorithmic procedures, recursive models, fractals, theories of chaos and Markov chains to music creation. As the first experiment of algorithmic computer composition is considered *Illiac Suite* (1955–56) for string quartet by Lejaren Hiller and Leonard Isaacson. The interval succession was programmed by algorithm of Markov chains (Mason, Saffle, Schütz, 1988; 794). It is well known that Yannis Xenakis was one of the first to begin the experiments with implications of stochastic processes and group theory in music material. The composer has invoked an original computer program of sounds synthesizing GENDYN (GENeration DYNamique or Dynamic Stochastic Synthesis) in his piece *Gendy 3* (1991) (Xenakis, 1992). Musicologist Griffiths points out the analogies with computer images by Mandelbrot in the layers of chromatic successions that he observed in the 6th etude for piano *Automne à Varsovie* (1985) by György Ligeti (Griffiths, 2001, Ligeti, 694). After investigating the piece by Charles Dodge *A Fractal for Wiley Hitchcock* (1989) I determined a fractal principle that was applied to creating process. Dodge composed the elements of tone pitch, rhythm and amplitude of another work – *Profile* (1984) by computer under the algorithm of 1/f noise. After remarks by musicologist Järveläinen Finnish composer Ville Pulkki in his composition *Kuusi* used the graphics of fractal – Koch snowflake that determined the parameter of piece structure (Järveläinen, 2000; 9). The principle of fractal as composing technique's algorithm was realized by Lithuanian composer Vytautas Jurgutis in *Fractals* (1999) (Example 9).



Example 9. Fractal principle forming the 2nd piano melody. Vytautas Jurgutis' *Fractals* (1999)

Under the analysis of John Adams's composition *China gates* (1977) I should define that the parameter of time and relations between separate partitions were modeled using the curve algorithm as a graphical matrix charted in the first page of score. Martin Supper noted that Hanspeter Kyburz for his *Concert for saxophone and ensemble* has used algorithms of Lindenmayer system recursive sequences in the compositional process (Supper, 2000: 51). After Tom Johnson himself for prototype of composer's several works were chosen various mathematical equations. The equations of chaos theory such as Verhulst equation (that expresses the population growth studies) were in service for prototype in Gary Nelson's computer compositions *The Voyage of the Golah Yota* (1993). Nelson used Verhulst equation's diagram that was generate by computer into music sounds (Nelson, 1994).

Conclusion

Obviously the problem field of music and mathematics interaction splays out in 20th century. So after practical remarks and investigations I would like to highlight significant aspects of mathematical influence to 20th century music composition:

• *First*, the experience of compositional practice in earlier epochs is concentrated and synthesized in 20th century music remarkably;

• *Second*, a distinctly individualized composers' attitude and approach to tradition of *numerus sonorous* in music evidences, and

• *Third*, individual purposes of numerical procedures using are determined.

As we see many contemporary compositions hide themselves the way of special numerical "encoding" and ciphers of numerological interpretation that are distinctive in each of them. This aspect of searching the oneness, individuality and originality in every music piece determined that an age-old *numerus sonorous* experience and methods and tools of its implementation manifest in 20th century not only as synthesized but also sometimes as chaotic forms.

On the ground of mentioned above examples we could state, that the variety of numerical manipulations and composing methods in the music of 20th century is determined by subjective factor, often going alongside and even ignoring age-old traditions of numerical methods. The subjective factor of modern numerology manifests by:

a) Choosing technologies and methods of composing;

b) Reflecting every composer's different attitude to the possibilities of the same technologies and methods.

However in exceedingly varied and even chaotic numerical techniques of composing music in 20th century I would like to determine two summarizing tendencies of number manifestation:

• *First*, is connected with pure technological aspects of compositional process where the numbers are manipulated as composing implement or as structuralized algorithms during music piece creating without any semantic purpose, and

• *Second*, represents a detection and display of conceptual and semantic number function in music score. In this instance number is no longer composer's "work tool" only but also is a final result of creation process. Number functions both as organizing composition factor and as meaningful, semantic and symbolical idea or content of music composition.

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Santrauka

Matematikos įtaka XX a. muzikos komponavimo procesui

Pranešime tyrinėjama matematikos ir muzikos sąveika, įvairiomis formomis besitęsianti dar nuo antikos laikų. Antikos laikotarpiu gyvavo Pitagoro muzikos intervalų ir matematinių santykių sistema, o viduramžių misticizmas nulėmė tiek pačios kultūros, tiek ir muzikos sakralizaciją, sureikšmino religinius simbolius (taip pat ir skaičius, kuriems buvo suteiktos simbolinės reikšmės). Renesanso pasaulėžiūroje palikusi pėdsaką graikų intervalų racionalizacijos sistema, galima sakyti, atitiko šiai epochai būdingą antikos grožio filosofiją ir jos materialią išraišką – matematiniais simboliais išreikštų proporcijų santykius, jų atgaivinimą ir įkūnijimą įvairiose meno srityse – architektūroje, literatūroje, dailėje ar muzikoje. Muzikinė baroko epocha išsiskiria sakralia krikščioniškosios numerologijos tradicija, atėjusia iš mistiškos viduramžių pasaulėžiūros, ir ja pagrįsta komponavimo tradicija. Klasicizme matomos formos architektonikos proporcijos, plačiai suvokiamas „kvadratiškumas“ rodė matematiškai subalansuotų formos elementų darną. Nors dar XVIII a. muzikos sinonimas buvo „skambanti matematika", tačiau Švietimo amžių pakeitęs romantizmas išsiskyrė itin suklestėjusiu antiracionalizmu („protas gali klysti, jausmas – niekada“) bei matematikos ir muzikos antagonizmo kulminacija.

Vis dėlto XX a. pradžioje į muziką vėl atsigręžta kaip mokslo objektą (pvz., I. Stravinskis teigė, kad „kompozitoriaus mąstymo specifika mažai skiriasi nuo matematinio mąstymo“), kuriame sukoncentruotas ir susintetintas ankstesnių epochų patyrimas, XX a. garsų meno ir skaitmens konstrukto sąveikų raiškos tampa itin įvairialypės, koegzistuojančios kaip skirtingų numerologinių tradicijų sankloda: XX a. muzikoje daug įvairių religijų numerologinės simbolikos, pasaulio harmonijos proporcijų, skaitmeninių progresijų (Fibonacci, Luco), „aukso pjūvio“ proporcijos, simetrijos ir asimetrijos konfrontacijos poliritmijos, polimetrijos lygmenyse.

Greta ankstesnių epochų savitas numerologines muzikos komponavimo tradicijas sintezavusio fenomeno XX a. išryškėja ir nauja muzikos matematizacijos kryptis, susijusi su šiuolaikinės matematikos teorijomis. Tai inspiravo naujos pakraipos analizes: algoritminių procedūrų, rekursinių modelių, fraktalų, chaoso, tikimybinės Markovo grandžių teorijos taikymo muzikos kūrimui tyrimai (pvz., Y. Xenakis eksperimentavo su stochastinių procesų, grupių teorijos implikacijomis į muzikos audinį; C. Nancarrowo kanonų tempus ar T. Johnsono kompozicijų struktūrą diktavo matematinės formulės; G. L. Nelsono kompiuterinės kompozicijos pirmavaizdžiais tapo granulių sintezės ir chaoso teorijos lygtys; Ch. Dodge'as kūrybos procesui pritaikė fraktalų principus; J. Cage'as ar M. Feldmanas eksperimentavo su tikimybių teorijos apraiškomis muzikoje). Keletą šių aspektų iliustruoja ir pranešime pateikiamos muzikos kūrinių analizės.

Martin Wesley-Smith

Concepts of audio-visual composition in my own work

As a composition student in the 1960s I was eager to explore as much as I could about as many different genres and styles of music as possible. This included classical music, serialism, avant-garde, minimalism, *musique concrète* and electronic music, but also ethnic and folk musics and jazz. One of my earliest interests was the combination of sound and image, explored initially through interactive installations involving live and taped video, photographs, slide projections, live electronics, and so on. Some involved light-dependent resistors controlling analog oscillators so that projected images modulated live electronic music, for I was seeking ways to bring aural and visual images close together.

Later, in the 1980s, when personal computers became available and MIDI had been established as a means of communication between computer-based instruments, I wrote programs that created images from music, or used MIDI controllers to modulate existing video images – by, for example, changing colours, or distorting shapes, or applying prepared video effects.

These experiments depended, of course, on current technology, which was changing and developing all the time – as, of course, it still is. More particularly they depended on the technology that was *available* i.e. cheap enough for me, or for the Electronic Music Studio I ran at the Sydney Conservatorium of Music, to be able to afford. Early experiments used Moog and VCS3 analog synthesizers. Later on, in the 1980s, I was able to use a Fairlight Computer Musical Instrument – the Fairlight CMI – and its video counterpart, the Fairlight CVI, or Computer Video Instrument.

I was interested in applying musical concepts of rhythm, colour, density, and so on, to images, and in integrating these with music. A musical rhythm, for example, would be combined with a contrapuntal visual rhythm. Music of rich tone colour would be combined with rich visual colours. Or, in contrast, with bland pastel colours. What was the effect of these sequences? How did the meaning of a passage of music – as far as one could articulate or feel it – change when displayed simultaneously with a visual passage acting in unison, or contrapuntally in terms of, say, duration, colour, location, and/or density? What differences were there in the audience's response? These were complex questions that I could only answer intuitively – perhaps one day someone will research them in the same way that Muzak researched people's emotional and physical responses to different kinds of music. But I hope not: the last thing I want to see is a practical manual on how to control people through the audio-visual medium. That is something for the propagandist. As an artist I want to set up a rich labyrinth of emotive possibilities through which the listener/viewer can find her own path.

In the course of experimenting with technology, I discovered, as many other composers did, that, firstly, it was very difficult to devise a system that was reliable enough to use effectively in public performance. This was not necessarily a bad thing, for sometimes the unexpected results obtained were highly desirable. On too many occasions, however, they were undesirable, or – worse – there were no results at all. One defective lead could kill the whole performance. Secondly, one had to move and set up an enormous amount of equipment, some of it very heavy. Thirdly, it was very difficult for others to perform the pieces, for if they were technologically savvy enough, the odds were that the equipment they had was not the specific equipment the piece required. After a while, these frustrations led one to fantasize about pencils, and manuscript paper, and returning to music for simple wooden flutes.

In the 70s I created, with others, performance events that used 360 degree slide and film projections along with dancers, actors, live photography and video, and so on. While exciting, it ultimately proved frustrating to know that there were images being projected behind your head that you couldn't see. Even using multiple screens at the front of the hall was frustrating, for you still had to move your head and it was impossible to see everything. This was not so much a problem when using abstract images, but by then I was tiring of abstraction and wanted to deal

with images from the real world. This was partly because I'd become something of an activist concerned with various political and humanitarian issues. The most important of these, for me, was the 1975 invasion by Indonesia of East Timor, a tiny Portuguese colony very close to Australia.

At first I did what other activists did: I attended demonstrations and wrote letters to newspapers and politicians. My life was going in two separate directions: I was doing what I could to bring about political change in order to stop the blatant human rights abuse being perpetrated on innocent civilians – beatings, torture, rape, killings, the theft of their property and the exploitation of their natural resources – while at the same time I was composing abstract music that seemed a million miles away from the very real needs of real people. Looking back, it was inevitable that these two strands would come together. By then I'd realized that as a composer the best way for me to create effective music that other people found moving – music that primarily appealed to people's emotions rather than to their intellect – was to respond very directly to my own emotions, to what moved *me*. The suffering of the people of East Timor led me to create audio-visual pieces about their plight. If those pieces helped in the push for a positive change to the situation – which, in their small way, they did – then perhaps they would have a useful social function, whatever their artistic value.

For my first Timor piece – "Kdadalak (For the Children of Timor)", for prepared piano, percussion, tape & images, 1977; photography by Penny Tweedie) – I used a slide projector system with six projectors on three screens. Several performances later, in Hong Kong, Sydney and Tokyo, Penny and I came up with a version minus the live musicians and that used just two projectors on one screen. This was less spectacular but more focused and effective. It was also far easier to present. Later on I did pieces using nine computer-controlled projectors on one screen. This was a powerful system, but the amount of equipment needed to show the pieces was staggering, resulting in the pieces receiving just a handful of performances. It was not until personal computers became powerful enough, and data projectors were cheap enough, that I was able to do away with bulky slide projectors forever and do everything with the system I'm using now: a laptop computer (Apple Macintosh) plugged into a stereo sound system and an LCD projector. In some way it's inferior to using slide projectors: the resolution of the images, for example, doesn't come close to that of film, and only very expensive data projectors have a really good digital black. But I'm prepared to trade in these qualities for the ease of performance, and increased performance opportunities, that the current system offers. After all, what practical use is an audio-visual piece, especially one designed to bring attention to a particular human crisis, if it can only be seen/heard by a handful of people?

In the past few years I've been presenting concerts with Australian clarinetist Ros Dunlop, our repertoire including the Timor pieces "X", for clarinet & computer (1999, the title referring to East Timorese resistance leader and, now, President, Xanana Gusmao); "Welcome to the Hotel Turismo", for bass clarinet (originally cello) & computer (2000); and "Tekee Tokee Tomak", for clarinet & computer (2003, after East Timor had finally won its independence). Other pieces include "Merry-Go-Round", for clarinet (originally clarinet & cello) & computer (2002), about Afghanistan; "Weapons of Mass Distortion", for clarinet & computer (2003, about the official use of propaganda, doublespeak, lies etc, especially those that led to the invasion of Iraq by the so-called "Coalition of the Willing"); and "Papua Merdeka", for bass clarinet & computer (2005, about the plight of the West Papuan people). We are able to carry with us most of the necessary equipment, needing the venue to supply just a stereo sound system and screen.

In these pieces I've moved on from normal compositional concepts. While I try to make them work as artistic creations, they must also impart information about the real world, hopefully inspiring their audience to think about a particular situation and to find out more. To that extent they have a documentary aspect. Although they mostly use still images, texts etc, they have a filmic quality. But the music, especially when a live performer is used, plays a more important role than it does in most films, for it is composed in conjunction with the sequencing of the images. It sometimes uses spoken and sung texts, and concrete sounds, as well as acoustic and electronic sounds, sometimes supporting the images, at others working in counterpoint to them, or supplying a contrasting line of thought. It is mostly not music with accompanying images, or images with a soundtrack, but an audio-visual whole composed with all elements – colour, rhythm, density, dynamics, and so on, in both sound and image – in mind.

I'm often accused of making propaganda for a particular political point of view. I reject this, for these pieces have nothing in common with propaganda (repetition, disinformation etc.). They leave the audience in no doubt as to where my sympathies in a specific situation lie, but they make few assertions, preferring to raise issues and promote discussion. Some critics claim that politics and music should not mix, a view I wish I could share. But humanitarian crises and politics are inextricably linked – one cannot deal with one without involving the other – and music is, in various ways, inherently political. In creating an audio-visual piece stimulated by the plight of the people of West Papua, for example, one has to deal with the politics that led to that situation; in choosing to compose that piece rather than an abstract orchestral piece, say, one is making a political choice: create a piece that can go anywhere – from a village in East Timor to an art gallery in Chicago – or go with the musical *status quo*, which is often used to support the political *status quo*.

Looking back, the audio-visual pieces I'm doing now are the result of eclectic tastes, a variety of interests, many years of experiments, powerful and relatively inexpensive new technology, and a steady artistic evolution from my days as a student. I've tried to follow my own path – as all artists must – refusing to bend to the dictates of either academe or the market place. One can do no more. Or less.

Santrauka

Audiovizualinio komponavimo koncepcijos mano kūryboje

Audiovizualinio komponavimo koncepcijas tyrinėju jau nuo studijų laikų aštuntojo dešimtmečio pradžioje. Nors ir kuriu muziką kinui bei videofilmams, mane dėl įvairių priežasčių labiau domina nejudantys, o ne judantys vaizdai.

Tinkamos technologijos pasiūla (atvirkščiai proporcinga jos kainai) yra pagrindinis faktorius, renkantis ir įkūnijant savo kūryboje tam tikrą audiovizualinę koncepciją. Pradėjęs nuo vieno ar poros skaidrių projektorių, palaipsniui perėjau prie devynių kompiuteriu valdomų projektorių naudojimo viename ekrane. Šiandien viską kuriu portatyviniu kompiuteriu, o atlikimui naudoju duomenų projektorių.

Visi ligšioliniai mano audiovizualiniai kūriniai pasakoja apie tikrus dalykus ir įvykius, pvz., apie Rytų Timoro gyventojų padėtį po 1975 m., kai šią šalį okupavo Indonezija. Pranešime aptariami šios kūrybos srities, kurią galima būtų pavadinti „politine multimedija“, politiniai ir kitokie aspektai, demonstruojamos pagrindinės koncepcijos, kaip pavyzdžiai paimti tokie kūriniai, kaip „Weapons of Mass Distortion“ (Masinio iškraipymo ginklai) klarnetui ir kompiuteriui (2003) ir naujas kūrinys apie padėtį Papua-Naujojoje Gvinėjoje. Pabaigoje nagrinėjama, kaip technologijų tobulinimas galėtų paveikti audiovizualinį komponavimą.

Paul Roe

A Phenomenology of Collaboration in Contemporary Composition and Performance

This paper is an introduction to some of my recent research activities, which relate to composers and performers of contemporary music working collaboratively. I will start by giving an outline of my research and then I will discuss briefly some of the initial findings from this research.

Research Activities

Over the past two years I have been researching the area of collaboration in contemporary music, and more specifically how composers and performers work together. This study was prompted by my own experiences over many years of playing contemporary music, providing me with the opportunity to observe both composers and performers working creatively together in a practical setting. I considered this an interesting area to explore as I have found from experience the relations between both sets of musicians can be fraught with misunderstanding. As a performing musician, I wanted to maintain a practical focus in my research, so in an effort to better understand collaboration in composition and performance I devised an investigation best suited to my practical environment where the complementary areas of performance, education and research could best co-exist.

In this regard I commissioned five prominent Irish composers to write pieces for me as a bass clarinettist to perform. These composers – Ed Bennett, Rob Canning, Stephen Gardiner, Ronan Guilfoyle and Jane O'Leary, are amongst Irelands most revered musicians, three of whom are members of Aosdana, the body established by the Irish Government to honour and support creative artists in Ireland. From the beginning I made it clear to the commissioned composers that I wanted to look carefully at their mode of compositional process and also to examine closely the way we worked together as musicians. I agreed with the composers to meet a minimum of 3 times: at the beginning (before the composition began), in the middle (during the compositional phase) and at the end when the compositions were completed. Each meeting was recorded and transcribed; I also kept a reflective journal of meetings dealing with any issues that I thought were relevant to the research. I asked the composers to keep sketches of their compositions and also to keep notes of any particular thoughts they had in relation to their compositional process. Between meetings I encouraged the composers to contact me if they felt it would be helpful. By the end of the second set of meetings I had a series of draft versions of the final pieces, which I then began to practice.

The meetings had broadly speaking two main components: firstly there was a formal interview of set questions and secondly a more informal playing, discussing, practical aspect, where ideas where discussed and tried out. For each of the meetings I devised a specific set of questions to ask each composer, dealing with a variety of areas including sketching, notation, experience of collaboration etc. (see Appendix A).

My own practice of the new pieces was also carefully documented, with the details of each practice session recorded in text form relating to: what specific method of practice was chosen, the mode of practice and why various artistic decisions where made. The reason to document the whole process so thoroughly was so that I could best understand the nature of collaboration as it applied to this particular research. It also afforded me the opportunity to get a better understanding of the creative processes involved in composing and performing. This practical phase of the research took place during the first six months of 2005 with the new pieces receiving their first performances in July 2005. The accumulated information and experiences are to be examined in detail in future papers with the following comments in this paper relating to a broad overview of some of the initial findings that include the following areas:

- Creative processes in performance and composition;
- Divisions within contemporary music;
- Composition and performance as integrated elements;
- Re-imagining contemporary music;
- Music in composition, performance and reception as inherently improvisatory.

Creative Processes in Performance and Composition

There is as much variety in the processes of composition as there are composers, as described by McCuthan in her book on composers' creative process 'the art of music composition ... illustrates in personal terms the notion that each composer's method of writing music is as individual as his or her fingerprint' (McCutchan, 1999: ix). The five composers I worked with as part of this research demonstrate this diversity, each composer approaching the development of new musical material in a unique and individual way. As an example I will briefly refer to two of these approaches: the first is from a composer who is essentially a jazz musician – Ronan Guilfoyle. He explained to me that he usually begins the process of composition with a basic idea for a melodic or rhythmic motif that he initially hears in his inner ear; once this becomes clear he plays this idea into the computer using a keyboard. From this initial idea the rest of the composition unfolds in a linear fashion with each new section added on to the previously composed material and then played directly into the computer. With each successive iteration he reviews previous material through audio playback and continues on from that point. Very little by way of editing takes place once the music has been played into the computer. The final phase of composition involves listening back to the completed work and adding further elements of phrasing and nuance. As the composer related to me in an interview ... I have played every single note of every composition I have ever written (Roe, 2005a).

In contrast the second example is of the composer Jane O'Leary who studied composition in America but has spent most of her life in Ireland. Her compositional process involves the repeated writing and rewriting of ideas until a musical shape develops. The musical material is constantly redrawn from within itself – as the composer herself commented, 'I just keep rewriting what I've got and it gets more elaborate and complex and more filled out' (Roe, 2005). In her view a sign of a good days work is when the wastepaper basket is full of discarded manuscript paper!

As with composition, so too performance, the process of realising and animating musical material involves a similarly diverse set of processes described by Nonken thus 'preparing musical works for performance invokes processes of learning and shed light on issues ranging from basic approaches to information processing (top-down versus bottom-up approaches, schema-driven learning strategies, and the mediating role of pre-acquired domain specific knowledge)' (Nonken, 2002: 1). The approach taken in realising these new works necessitated a variety of creative approaches, which was informed by the collaborative nature of the project. In the case of the work composed by the first composer Ronan Guilfoyle, the approach to working on this piece required developing rhythmic security and constancy throughout, with a clear jazz inflection right through the piece. This involved the grooving of patterns and the repetition of individual sections, eventually linking the three movements of the complete work together. A clear understanding and feel for jazz idioms being a prerequisite to appropriate realisation.

In contrast the working out of the musical material created by Jane O'Leary required an emphasis on texture, tonal spectrum and dynamic shading with rhythm and melody of secondary interest. The shaping of phrases, the amount of air to use for given tone colours, the degree of accent, the level of dynamic gradation all became primary considerations in preparing this work. The corresponding practical and creative applications of technique and imagination are in many ways similar to the act of composition itself where creative choices are key to realisation. The notational schemes in both of these works (as with most contemporary music) give a very incomplete indication of the real world of sound, as Barenboim has suggested in relation to notation when referring to Beethoven's fifth symphony, nobody is going to convince me that these black spots on white paper are the fifth symphony ... it comes into being only when an orchestra decides to play it, the peculiarity of music resides in the fact that there's this phenomenon of sound, music expresses itself only through sound (Barenboim, 2003: 111).

With both of these pieces the collaborative engagement between performer and composer assisted in compositional and performance processes resulting in a unified view of these new works.

Divisions Within Contemporary Music

The position of the composer or artist as being separate from society has historical antecedents, and resonances of this notion are still to be found in contemporary music composition. To

paraphrase the composer Ronan Guilfoyle, ... this attitude of some composers that they write in splendid isolation still exists ... that this (music) is passed down, and I use the phrase passed down deliberately, to the performer to do his best with it, and then for the performer to present this to the public, of whom he (the composer) has very little interest – the performer provides a sort of "cordon sanitaire" between the composer and audience (Roe, 2005b).

Whilst these sentiments expressed can seem a little extreme, they do however represent a common perception amongst musicians. It can often appear that some composers consider the "musical work" as pre-eminent with the ensuing performance and reception of same as being of only secondary consideration. On the other hand the view of some performers in relation to contemporary composition can be dismissive and lacking in engagement, especially those performers who primarily play the traditional classical repertoire. As a result of these prevailing attitudes the communication of new music can end up undergoing a series of expressive barriers before an audience gets to hear the new work.

Composition and Performance as integrated elements

The separation of performance and composition reflects the nature of contemporary society where individual specialisations are seen as a more efficient way to productive work. This separation of roles works against the essentially social and collaborative nature of music and "*musicking*" described by Small as a ritual in social space. In particular the distance between composer and performer in contemporary music can often be significant, with little communication on either side, that can result in misunderstanding and poor realisation of new work. In an effort to counteract this situation, performers and composers could usefully develop a more collaborative mindset, where it is acknowledged that both are engaged in effectively the same work: the creation of innovative music.

In furthering this suggestion, it is acknowledged that performers who play contemporary music take a different approach to performance when compared to the more traditional classical performer. This approach places creative engagement with new techniques and ideas as central, with performance being primarily about creative animation as opposed to the more prescribed interpretive approach of the mainstream performer. Given this mutual aspiration of contemporary composers and performers, a more effective way of conceiving and developing new music would be to conceptually and practically realign composition and performance where both activities are seen in equal relation. The creative relationships and processes developed being circular as opposed to hierarchical. These relationships can flourish in contemporary music ensembles, provided the approach taken is egalitarian where the motivating factor is the development of innovative work and not the promotion of individuals.

Re-imagining Contemporary Music

A conceptual and practical redrawing of the lines between composer, performer and audience would help develop a more integrated view and reception of contemporary music. The promotion of a collective mentality where all parties feel they are an important component in the making of the music, be it composing, performing or listening would strengthen the whole area of contemporary music making. In certain ways jazz represents a good model, where often the audience is seen to be as important and knowledgeable as the composers and performers themselves. There seems to be an inherent recognition by all involved, that the music itself is pre-eminent and galvanising, representing mutual respect and communal interest.

Both structural and attitudinal changes are required if a wider community of interest is to be developed for new music, where collaboration and communication represent a way forward. To effect these changes organisations that support contemporary music need to promote the music in a broad perspective with strategic initiatives to engage a wider audience of interest. The current top-down situation is inherently divisive where newly composed music is seen as pre-eminent with performance often considered as ancillary and audience reception as almost incidental. A new vision where audiences, performers and composers are placed on an equal footing would encourage greater involvement for all.

Music as inherently improvisatory

To achieve a more balanced approach to contemporary music making necessitates; removing the glare of attention from newly composed pieces and world premieres, to promoting the whole process of contemporary music making and reception as pre-eminent. This can only happen if all involved are considered equal, which is often not the case in contemporary music, where the composer is seen as paramount with the performer and audience given secondary consideration. We need to consider and promote an attitude that all people engaged by contemporary music be they audience, performer or composer are in fact creatively involved and united in searching for new worlds of sound. This engagement calls on all to respond spontaneously and flexibly utilising creative imagination. These new worlds initially exist in the imagination and whether it is through composing, performing or listening that these sounds are brought to life, it is the creative act of imagining that is central to the experience. In the words of the philosopher Bruce Ellis Benson ...music making is actually continual creation and recreation of music-a constant improvisation (Benson, 2003).

Appendix A

Composers Questions (Interview One)

Talk a little about your experience of collaboration with performers.
How did these experiences affect the work being created?
How are the pieces you have composed with collaboration and without different/similar?

How has collaborating with performers:
Affected your practice?
Impacted on you as a composer?
Influenced the works composed?

What types of collaboration have you experienced?
Do you have a favoured type?
How is transmission of musical ideas effected between composer, performer and audience?

How does collaborating affect:
Your creativity?
Your artistic satisfaction?
How do you see the relationship between composer, performer, and audience?
In summary can you talk a little about your attitude towards collaboration – strengths, weaknesses, opportunities and threats?

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Santrauka

Bendradarbiavimo šiuolaikiniame komponavime ir atlikime fenomenologija

Pranešime nagrinėjami komponavimo proceso elementai ir jų sąsajos su atlikimo praktika. Komponavimo ir atlikimo procesai šiame tyrime laikomi vientiso šiuolaikinio muzikos komponavimo proceso elementais. Manoma, kad naujo muzikos kūrinio gimimo procese egzistuoja kelios pakopos: kompozitorius (kūrėjas), atlikėjas (interpretatorius) ir klausytojas (suvokėjas). Ši nepajudinama hegemonija tarsi suskirsto kūrėjus ir atlikėjus į skirtingas stovyklas, o tarp jų iškilę barjerai atitinkamai veikia ir klausytoją. Konceptualus ir filosofinis ribų tarp komponavimo, atlikimo ir klausymo perkėlimas – tai kelias į labiau integruotą šiuolaikinės muzikos pavidalą. Koncepcija, kad muzika pagal savo prigimtį yra improvizacinė, suteikia ir muzikams, ir klausytojams galimybę kūrybiškiau joje dalyvauti. Rašydamas daktaro disertaciją Jorko universitete, daviau užsakymą penkiems žinomiems airių kompozitoriams parašyti solines pjeses (keliose iš jų panaudojant elektroniką), kurias pats turėjau atlikti. Vienas iš šio užsakymo tikslų buvo patyrinėti, įvairiomis duomenų rinkimo priemonėmis rūpestingai fiksuojant kūrybinio proceso eigą, dviejų menininkų bendradarbiavimą, jiems abiem suteikusį progą praktiškai pasidalyti kūrybine patirtimi. Pranešime nagrinėjama tyrinėjimų metodologija ir apžvelgiamos pirminės išvados, atskleidžiama komponavimo ir atlikimo procesų įvairovė.

Katya Slutskaya Levine

The Cultural Exotics or the Art Organism? The Creation of "Jewishness" in Shostakovich's Music

A large number of Shostakovich's compositions contain material related to Jewish culture. The extent of Shostakovich's use of Jewish associated elements in his works has intrigued musicologists and music theorists since the late 1970s.[1] The composer's ties with his Jewish colleagues and friends, his sympathies with the most discriminated against minority in the Soviet Union, and his possible identification with the feeling of persecution, being himself a persecuted artist, produced interpretations that recognize Shostakovich's Jewish elements primarily in terms of their political and historical subtext, with less regard for their musical importance.

Shostakovich indeed was well familiar with Jewish music and its context since at least 1926 through keeping acquaintance with many Jewish musicians. Some of his closest contacts included the Polish Jewish composer Mojsej Vajnberg [Mieczysław Weinberg] (1919–1996),[2] the Russian Jewish ethnomusicologist Mojsej Beregovskij [Moshe Beregovski] (1892–1961),[3] Shostakovich's composition pupil Veniamin Flejshman (1913–1941),[4] and the Russian composer Mihail Gnessin (1883–1957), who employed klezmer melodies in his incidental music for the last scenes of Vsevolod Mejerhol'd's (1874–1940) 1926 theater production of Gogol's *The Government Inspector*.[5]

Shostakovich conveyed his sentiment toward Jewish extra-musical aesthetics when commenting to the poet Aaron Vergelis on the ability of Jewish music to express radically different emotions simultaneously: "It seems I comprehend what distinguishes the Jewish melos. A cheerful melody is built here on sad intonations... A cheerful song is sung because one is sad at heart."[6]

The composer also talked about the relation of Jewish music to his own musical philosophy in an interview with the musicologist Solomon Volkov:

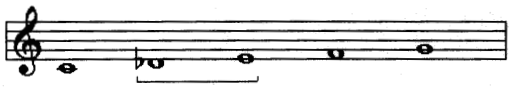
> *I think if we speak of musical impressions, the Jewish folk music has made the most powerful impression on me. I never tire of delighting in it, it is multifaceted, it can appear to be happy while it is tragic. It is almost always laughter through tears. This quality of Jewish folk music is close to my own ideas of what music should be like. There should always be two layers in music. Jews were tormented for so long that they learned to hide their despair. They express despair in dance music.... I can say that Jewish folk music is unique.*[7]

Shostakovich's Second Piano Trio (1944), Op. 67, his First Violin Concerto (1948), Op. 77, and the Fourth (1949), Op. 83, and the Eighth (1960), Op. 110, String Quartets, contain many clear-cut references to the Jewish musical folklore.[8] However, the sympathy that Shostakovich may have felt for the Jewish people as victims of systematic persecution and his interest in Jewish music have produced more than a musical lexicon based on borrowed values. The multifaceted nature of Jewish folk music lies at the heart of the composer's own musical organization, particularly his modal system. So similar are Jewish and Shostakovich's own tragic-satiric dispositions that their likeness emerges even in compositions that have not been thought to possess "Jewish" extra-musical characteristics. On the other hand, in the works that undeniably belong to his "Jewish" canon, such as the song cycle *From Jewish Folk Poetry* (1948), Op. 79, the composer's sentiments for the Jewish music assume forms more general than specific. This paper contends that in Shostakovich's musical oeuvre the Jewish inflections often derive from the composer's own modal extensions that originate in his palette of chromatic distortion of conventional scale types.

In discussing the affinity between Shostakovich's and Jewish melodic formations, it is useful to review some of the emblematic Jewish modes. There are two scalar structures that are most commonly found in the folk songs and instrumental tunes of Eastern European Jewry. Both of them range within an interval of a perfect fifth and contain an augmented second interval. However, they are distinct in the order in which the augmented interval is positioned within each mode. In the Jewish folk repertory, these two scales do not partake in the same musical composition. According to the scholars of Jewish traditional music, Mark Slobin and Mojsej Beregovskij, the provenance of these structures possibly extends back to the religious musical art of the Babylonian Jews.

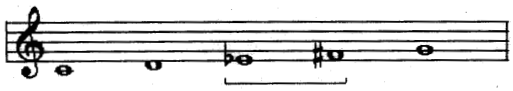
In one of these constructions, the interval in question occurs between the second and the third tones (Example 1). Nearly one-quarter of all Jewish instrumental tunes are in this mode, commonly known as *freygish* among *klezmer* musicians.[9] It bears resemblance to the *Ahava Rabah* mode of Ashkenazic synagogue music in the traditional European Jewish community.[10] Mojsej Beregovskij referred to it as "altered Phrygian" mode,[11] the altered part being the raised third tone that, together with the second tone, outlines an augmented second interval.

Example 1. Jewish "altered Phrygian" mode.



In the second characteristically "Jewish" melody-type, the interval of the augmented second appears between the third and the fourth tones of the mode (Example 2). It is termed "Ukrainian-Doric" by the scholar of Jewish music Abraham Idelsohn (1882–1938)[12] and "altered Dorian" by Beregovskij. It shares features with the Eastern Ashkenazic *Mi sheberakh* mode.[13] The "altered Dorian" mode is not very prominent in Jewish music, ranging from twelve to thirteen percent in the song and instrumental repertories.[14] Its use in Jewish music is strongest in areas where non-Jewish usage reinforces it.[15] This mode presents interesting possibilities for harmonization, because of its raised fourth scale-degree that may function as a subdominant as well as a "pivot" lowered dominant during modulation.

Example 2. Jewish "altered Dorian" mode.

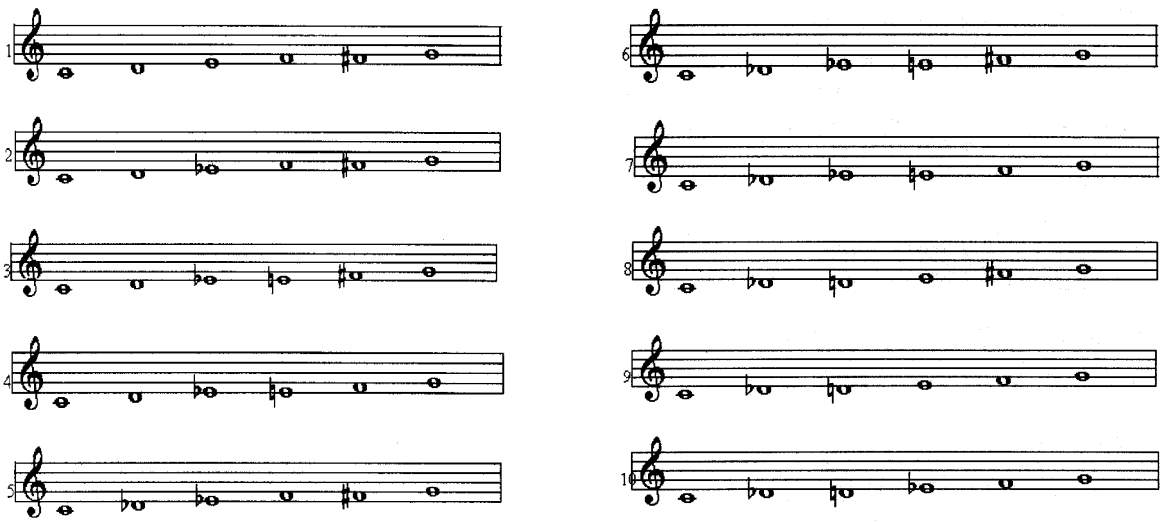


Forms of the Jewish "altered Phrygian" and "altered Dorian" modes are also in wide use in non-Jewish Eastern Europe, in Ukraine, Russia, Moldova, Rumania, Slovakia, Eastern Poland,[16] as well as in the Arab world.[17] These two modes in cross-fertilization are inseparable from Shostakovich's own personal enharmonic idiom.

Jurij Holopov (1932–2003), in his remarks, called attention to the pentachordal structure that often serves as a framework for Shostakovich's melodies.[18] Alexandr Dolzhanskij (1908–66), whose theoretical research from the 1960s focused on Shostakovich's modal organization, identified a resource of modal possibilities inherent in the composer's system of pentachords.[19]

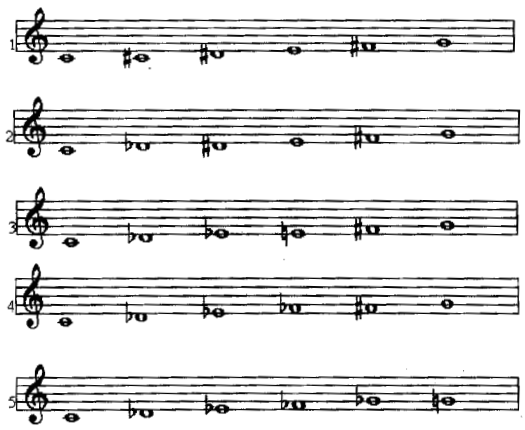
Within the range of a perfect fifth interval, Shostakovich's pentachordal system includes a variety of six-pitch formations, which Dolzhanskij named *Alexandrian pentachords*. Consisting exclusively of three semi-tone and two whole-tone arrangements, there are ten pentachords in the collection:[20]

Example 3. *Alexandrian pentachords*, after Alexandr Dolzhanskij.



According to Dolzhanskij, Shostakovich most frequently used the sixth pentachord. This construction is remarkable in several respects. To begin with, since the structure contains both intervals of a minor and a major third, it reserves an intricate combination of minor and major modes. In addition, its symmetrical nature allows for the reinvention into enharmonically equal but harmonically different scales:[21]

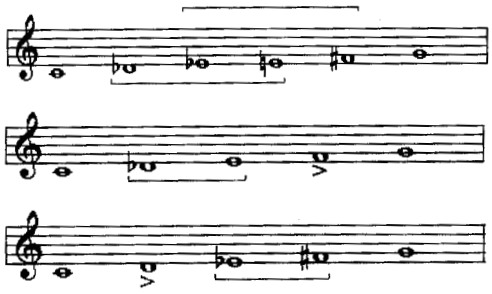
Example 4. Shostakovich's five enharmonically equal forms of the sixth *Alexandrian pentachord*.



The five variants of the *Alexandrian pentachord* form three pairs of harmonically distinct modes. The first variant is the all-sharps major mode with a major third interval; it leads to an all-together different harmonic interpretation than the fifth form – the all-flat structure that functions as a minor mode since it contains an interval of a minor third. The same relationship exists between the second scale – the combination of sharps and flats in a major mode and the fourth formula – a mixture of sharps and flats in a minor mode with the diminished fourth interval.

The third variant – the combination of minor and major third intervals – has contradictory characteristics, since it incorporates both minor and major modes. This structure – the original sixth *Alexandrian pentachord* – is the repository from which constructions that resemble Jewish "altered Phrygian" and "altered Dorian" modes (that are each other's harmonic inversions) could be derived. Since the formula contains both the lowered second and the raised fourth degrees, it presents possibilities for generating two augmented second intervals: one between Db and E-natural as in Jewish "altered Phrygian" mode and another augmented second between Eb and F# as in Jewish "altered Dorian" mode:

Example 5. *Alexandrian pentachord* and Jewish "altered Phrygian" and "altered Dorian" modes.



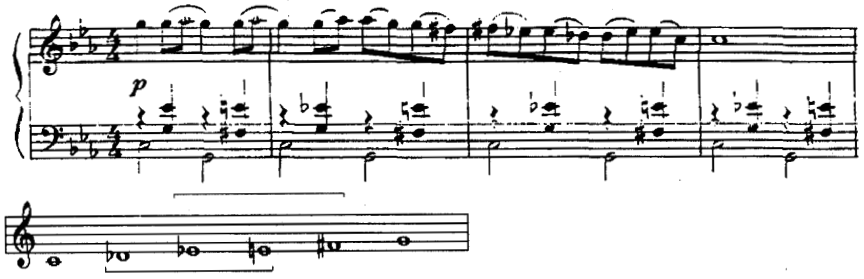
In comparison to the other four formulas of the sixth *Alexandrian pentachord*, the third variant lacks the gravitational tendencies of unstable notes and intervals resolving to stable notes and intervals, because of its ambiguous third scale-degree. Elusive, but self-contained, this *Alexandrian pentachord* contains possibilities for expressing the radically opposite emotions inborn in the symbolism of Jewish messages. The self-sufficiency of this pentachord does not necessitate Shostakovich to expand this scalar extraction into an octave – the adhered to principle in the traditional Jewish modal organization.

Each of the five variants of the sixth *Alexandrian pentachord* contains interesting combinations of augmented and diminished intervals and Shostakovich found use for all five symmetrical formations. However, it is the third variant – the combination of minor and major third modes – that appears regularly in Shostakovich's works that, according to Shostakovich scholars as well as the composer himself, have been regarded as part of the composer's "Jewish" canon.

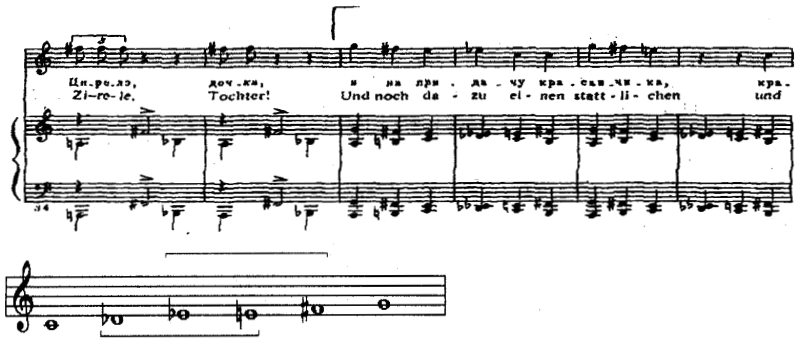
Shostakovich's compositions with "Jewish" predilection nevertheless do not contain the two distinct Jewish melodic formulas in their authentic and recognizable shape. The composer's "Jewish" melodies are identical to the arrangement of the *Alexandrian pentachord*. Hereby, they contain both Jewish modes at the same time – a precluded practice in the Jewish traditional repertory. Indeed, the modal structures with augmented second intervals that could be generated from the *Alexandrian pentachord* could only approximate the genuine Jewish scales (see Example 5, above). Therefore, Shostakovich's melodic structures that contain augmented second intervals, even in compositions with Jewish extra-musical subtext, may be seen more as extractions of inner, genetic features from the composer's modal language, the *Alexandrian pentachord* system, rather than cultural borrowings of the Jewish modal details.

The Shostakovich composition most directly related to "Jewish" themes is the song cycle *From Jewish Folk Poetry*, Op. 79, for soprano, contralto, and tenor with piano accompaniment. It was composed in 1948 to the translations of Yiddish texts. In the songs, the *Alexandrian pentachord* appears numerous times:

Example 6. Dmitrij Shostakovich: *From Jewish Folk Poetry*, Op. 79, Cradle Song, mm. 1–4.



Example 7. Dmitrij Shostakovich: *From Jewish Folk Poetry*, Op. 79, The Forsaken Father, mm. 36–41.

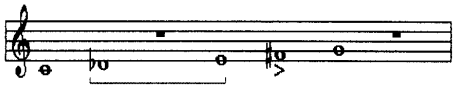


Keeping in mind that the Jewish "altered Phrygian" and "altered Dorian" modes that Shostakovich refers to in combination (Examples 6 and 7) would not appear in the same musical excerpt from the Jewish musical folklore, it should be contended that Shostakovich creates the Jewish colour not by musically borrowing but by drawing from his own musical vocabulary. This context substantiates that Shostakovich's pentachordal formations with augmented second intervals should be recognized as a self-determined feature of the composer's musical language with only a sonic likeness where appropriate or, in some cases, as we see in the next few examples, without a relation to the particularly Jewish musical vocabulary.

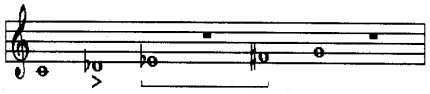
Often in his contextually Jewish compositions, Shostakovich makes use of the five-note constructions that correspond in note-number to the typical five-pitch Jewish modes. However, these five-note structures in Shostakovich's works bear no relation to the Jewish scales, their provenance being related to the contraction of the *Alexandrian pentachord*, namely, the extraction of one of the third scale-degree tones. This assertion can be proven by demonstrating that the traditional Jewish modes can no longer be derived from the *Alexandrian pentachord* when it is presented in the abridged five-note forms:

Example 8. Abridged forms of the *Alexandrian pentachord* as mere resemblances to Jewish "altered Phrygian" and "altered Dorian" modes.

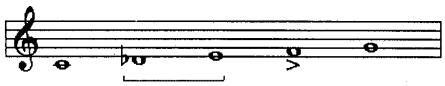
Alexandrian pentachord



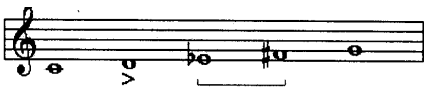
Alexandrian pentachord



Jewish "altered Phrygian" mode

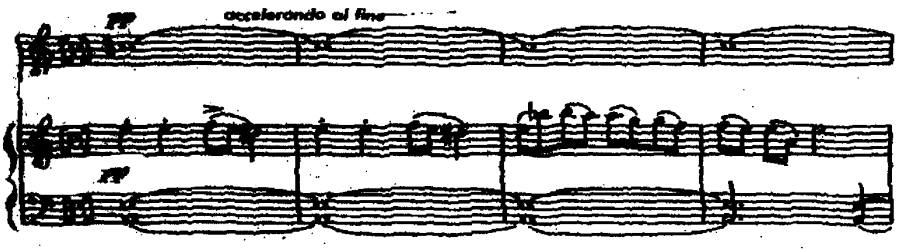


Jewish "altered Dorian" mode

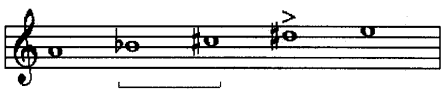


In examples from Shostakovich's songs *From Jewish Folk Poetry*, the contracted *Alexandrian pentachords* are mere sonic resemblances of the Jewish melos. The melodic formation from the "Song of the Girl" (Example 9) only simulates the Jewish "altered Phrygian" mode by including the augmented second interval between the second and the third tones of its scalar construction. Theoretically, it should be referenced as an abridged variant of the *Alexandrian pentachord*:

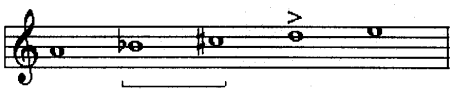
Example 9. Dmitrij Shostakovich: *From Jewish Folk Poetry*, Op. 79, Song of the Girl, mm. 100–103. Example of the abridged *Alexandrian pentachord* resembling the Jewish "altered Phrygian" mode.



Alexandrian pentachord

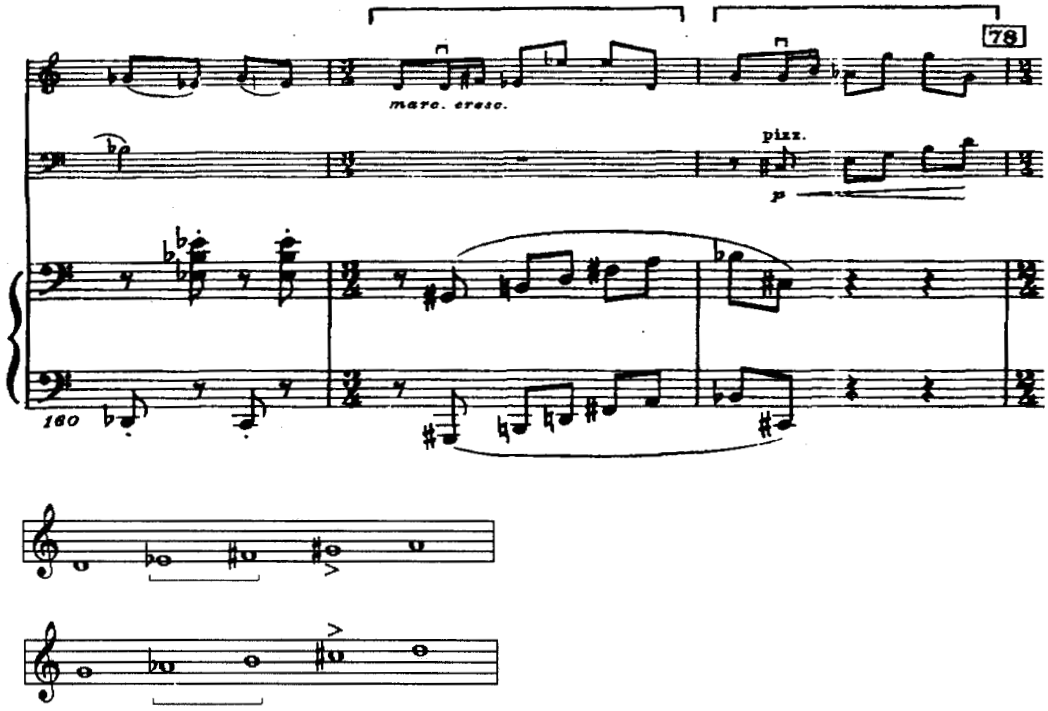


Jewish "altered Phrygian" mode



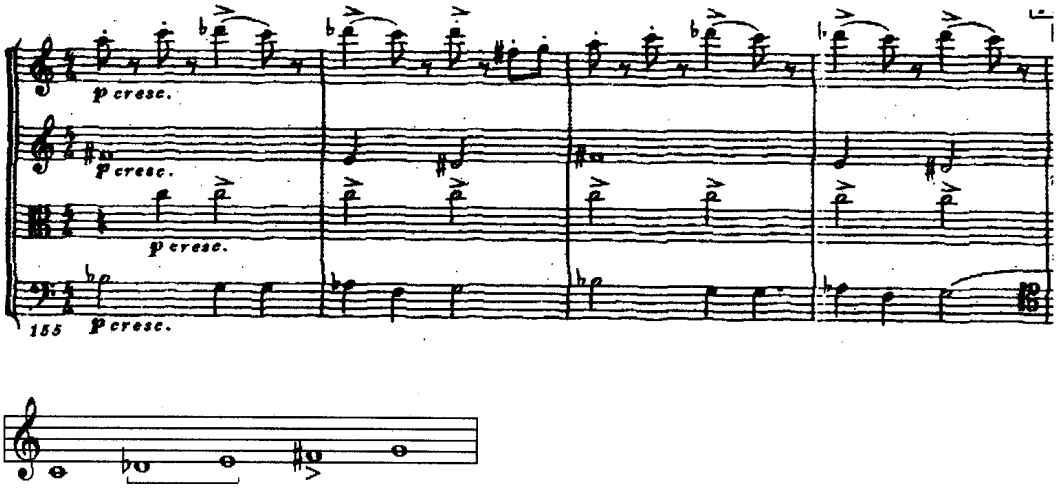
The same argument is true for Shostakovich's other compositions with "Jewish" extra-musical connotations. As transcription in Example 10 shows, in the fourth movement of the Second Piano Trio (1944), Op. 67, the scalar formation that includes an augmented second interval corresponds to the *Alexandrian pentachord*, rather to the authentic Jewish "altered Phrygian" mode:

Example 10. Dmitrij Shostakovich: Piano Trio No. 2, Op. 67, 4/R78-2.[22]
Example of the abridged *Alexandrian pentachord*.



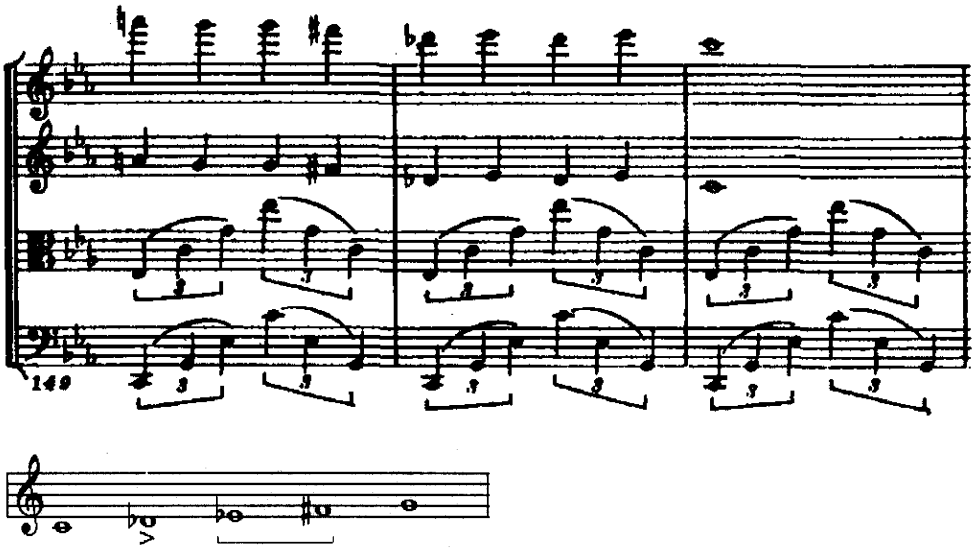
More examples of the same nature are found in Shostakovich's string quartets that belong to his "Jewish" canon. The quotation from the fourth movement of the Fourth String Quartet (1949), Op. 83 (Example 11), again displays an inclusion of the augmented interval only as a sonic resemblance to the Jewish "altered Phrygian" mode:

Example 11. Dmitrij Shostakovich, String Quartet No. 4, Op. 83, 4/R73+6.
Example of the abridged *Alexandrian pentachord*.



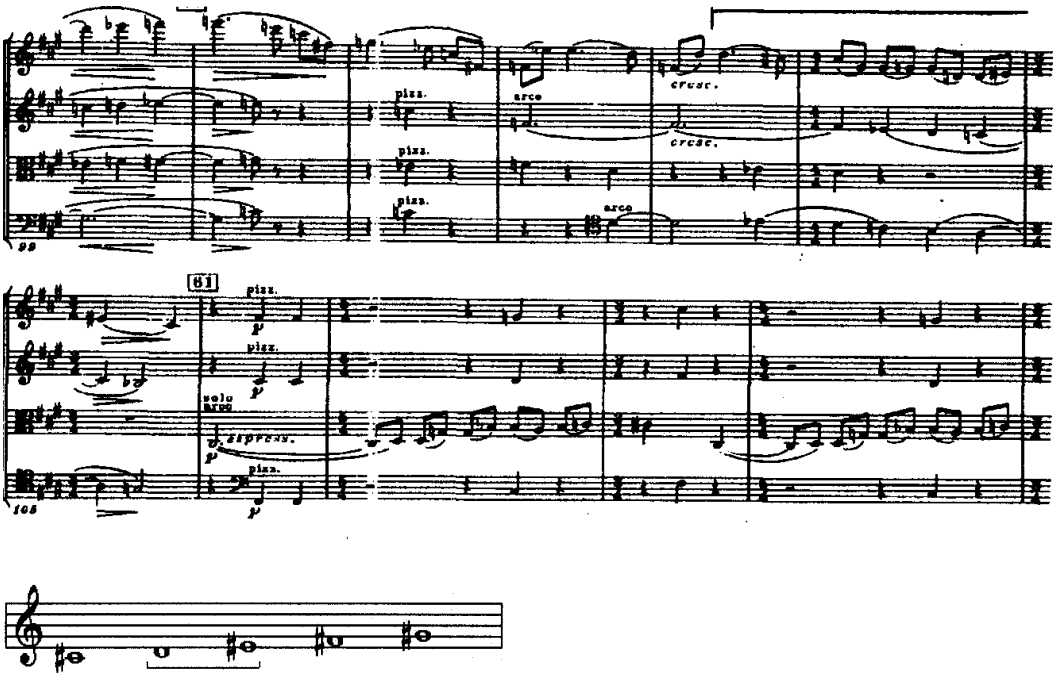
The excerpt from the fourth movement of the Eighth String Quartet (1960), Op. 110 (Example 12), demonstrates another *Alexandrian pentachord*, which sounds "Jewish", but does not belong to the genuine Jewish "altered Dorian" structure:

Example 12. Dmitrij Shostakovich, String Quartet No. 8, Op. 110, 4/R22-7.
Example of the abridged *Alexandrian pentachord*.

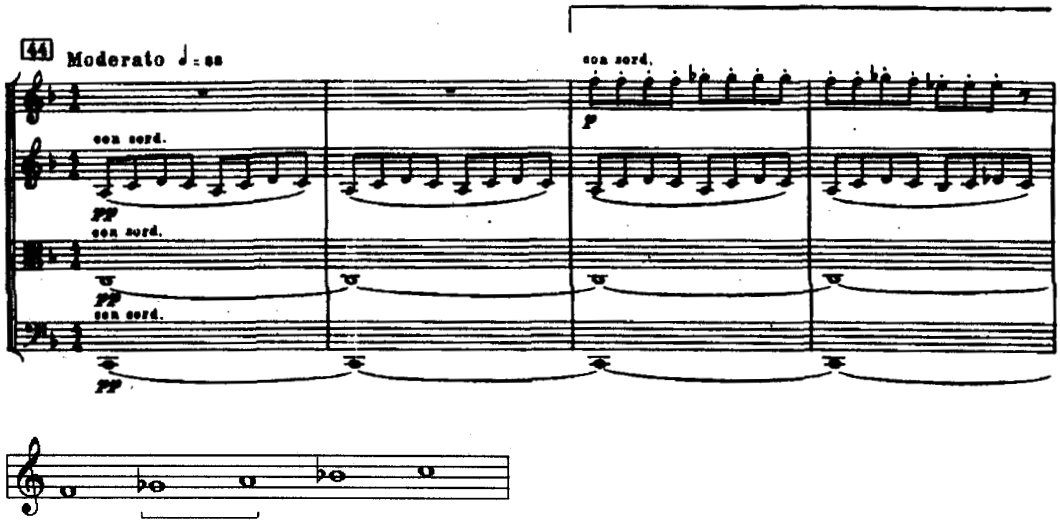


Some of Shostakovich's passages, in which melodic structures with the augmented second interval correspond precisely to the Jewish modal formations, belong not to the contextually "Jewish" songs *From Jewish Folk Poetry* or his Fourth and Eighth quartets, but to the string quartets Two (1944), Op. 68, Six (1956), Op. 101, and Eleven (1966), Op. 122, that relegate outside of Shostakovich's idiomatically Jewish music. These works that date from different periods of Shostakovich's creative life, contain modal formulas that are identical to the Jewish inflected modes (Examples 13, 14, 15):

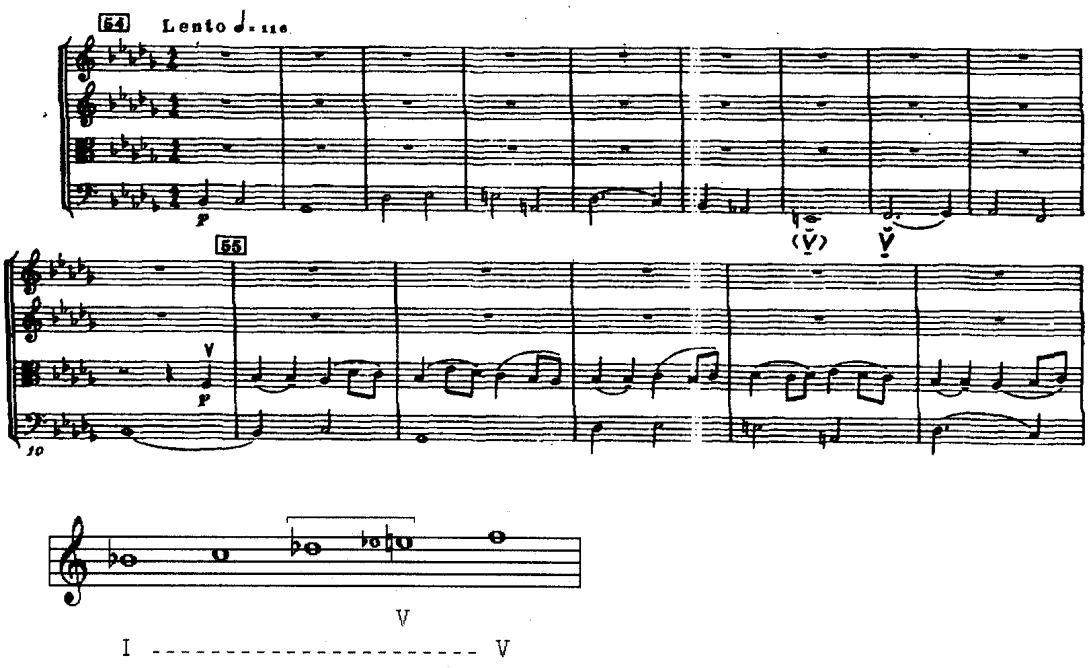
Example 13. Dmitrij Shostakovich: String Quartet No. 2, Op. 68, 3/R60 + 4.
Example of the authentic Jewish "altered Phrygian" mode.



Example 14. Dmitrij Shostakovich: String Quartet No. 11, Op. 122, 7/R44+3.
Example of the authentic Jewish "altered Phrygian" mode.



Example 15. Dmitrij Shostakovich: String Quartet No. 6, Op. 101, 3/R54.
Brief modulation; the scale is identical to the Jewish "altered Dorian" mode.

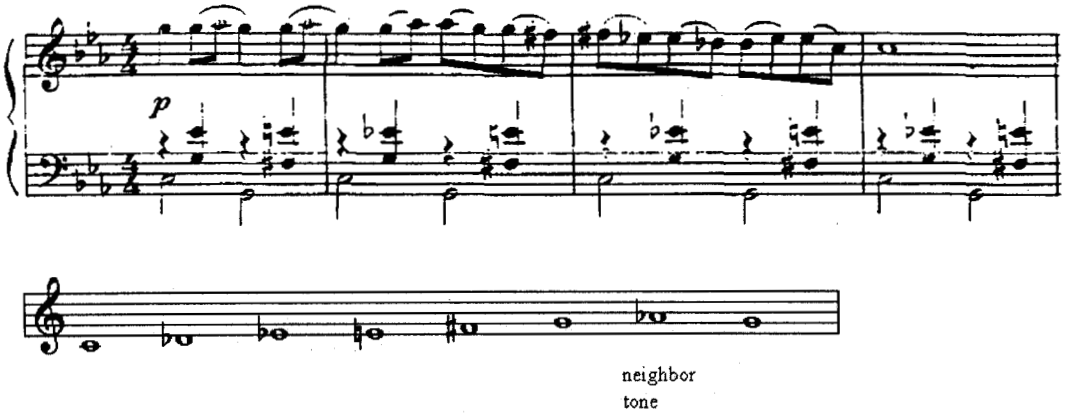


The quoted melodic structures could be classified as cultural borrowings on the part of the composer but, due to the context in which they appear, they should be categorized as byproducts of the *Alexandrian pentachord* and part of Shostakovich's own compositional lexicon.

In addition to the Jewish chromaticism, Shostakovich's sixth *Alexandrian pentachord* resembles an octatonic scale that begins with a semitone. Indeed, both Shostakovich's and octatonic scalar types do not establish a clear tonal center. However, there are, again, some differences involved between the two structures. When making distinction between the *Alexandrian pentachord* and the octatonic scale, it is essential to note the function of the first tone and the range of the melody.

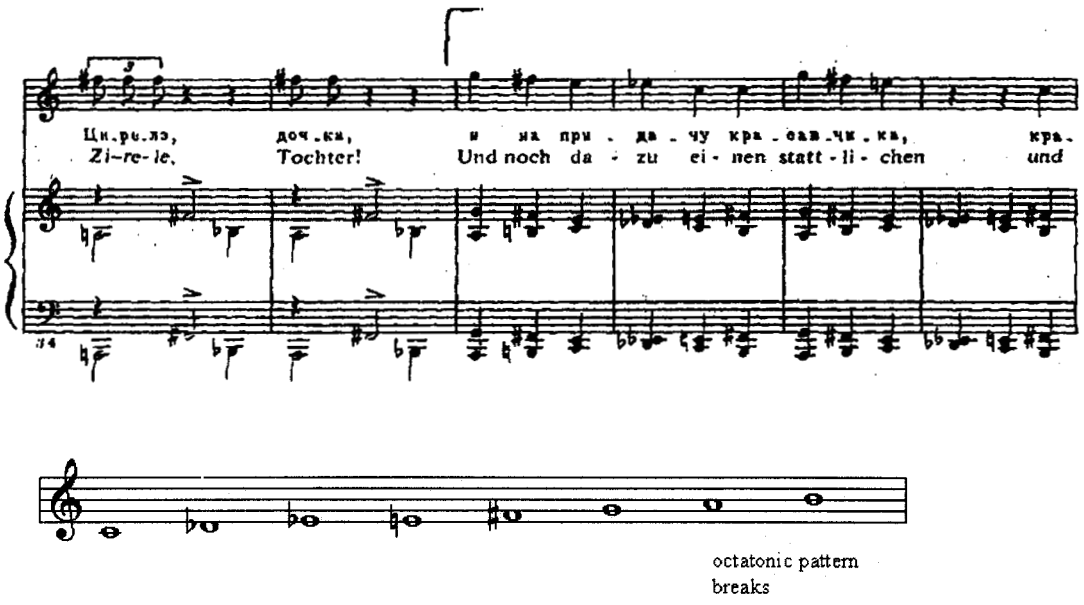
The prototype octatonic scale consists of eight pitches (from Lat. *octo*, eight). In contrast, the *Alexandrian pentachord* is limited to six notes within the range of a perfect fifth interval. In melodies with this construction, Shostakovich interrupts the octatonic pattern by either failing to present the movement from the scale-degree seven up to the scale-degree zero[23] (Example 16) – a feature that Shostakovich's formations share with the traditional Jewish modal organization – or by continuing the intervallic movement in an unsystematic way by the octatonic standards (Example 17). In octatonic as well as in some of Shostakovich's melodic structures, the enharmonic treatment of note components, in the absence of passing-tendency tones, attaches an independent meaning to all pitches of the scale. However, Shostakovich frequently amends this characteristic by having one of the notes in his melodic formations preserve the sense of a Tonic pitch in a tonality. Hereby, the implication of tonality reduces the tendency for scalar expansion that marks the formulaic octatonic passages:

Example 16. Dmitrij Shostakovich: *From Jewish Folk Poetry*, Op. 79, Cradle Song, mm. 1–4.



In the song "The Forsaken Father" from the *Jewish Folk Poetry* cycle, where Shostakovich continues with the motion beyond the *Alexandrian pentachord*, this movement is carried on in such a manner that it breaks the octatonic pattern, with the two whole-tone steps following in a row. Once more this example confirms that Shostakovich is relying on his own compositional lexicon rather than follows an acknowledged octatonic model:

Example 17. Dmitrij Shostakovich: *From Jewish Folk Poetry*, Op. 79, The Forsaken Father, mm. 36–41.



Commenting on the variety of meanings of Shostakovich's music that sounds "Jewish," it would be speculative to attribute its modal formations to the composer's explicit concentration in Jewish musical aesthetics, as in the case of his songs *From Jewish Folk Poetry* or the string quartets and other instrumental works with admitted Jewish subtext. To complement the non-referentially Jewish compositions with the prospective new musical vocabulary and arrive at purely imaginative politically charged statements would be another unjust hypothesis. Shostakovich's melodic models cannot be interpreted as an exclusive attentiveness to Jewish folk tradition nor only as the composer's purely artistic enthusiasm. In his oeuvre, these meanings coexist, becoming nuances in the complex superimposition of Shostakovich's own original musical units.

Shostakovich did not borrow from, thus, did not exoticize the Jewish music. Exoticizing, separating it from the main artistic stream and exposing the vulnerable musical tradition to superfluous attention would be, indeed, an ill-fated service to the discriminated group of people. Perhaps subconsciously, due to his close personal relationships and his interest in the Jewish culture, he understood that the Jewish folk music was a social fortuity in danger of gradual obliteration under the Soviet cultural establishment. However, it is doubtful that the composer conscientiously tried to salvage and at the same time avoid precariously exposing the tradition by way of creating loose stylizations of Jewish musical folklore in his non-contextually Jewish works.

The multilayered quality of the Jewish melos, its "laughter through tears"[24] character was too close to his own musical temperament. In addition, reinventing new modes out of the combinations of the existing ones embodied the composer's preference over the traditional major-minor Western system. In the subtext of his "Jewish" works, Shostakovich did not have to borrow; he only had to extract from his own compositional vocabulary of *Alexandrian pentachords* according to his and his listener's cultural perception of what Jewish music sounds like.

In practical artistry, it is the compositional system itself that generated the organism that we call Shostakovich's art. Communist or dissident, Shostakovich was an accidental political figure. The extra-musical partialities languish when juxtaposed with his purist musical mind, for the genius is that which is inherently cosmopolitan.

Notes

[1] Joachim Braun, *Jews and Jewish Elements in Soviet Music: A Study of a Socio-National Problem in Music* (Tel Aviv: Israeli Music Publications, 1978); "Shostakovich's Song Cycle *From Jewish Folk Poetry*: Aspects of Style and Meaning," in *Russian and Soviet Music: Essays for Boris Schwarz*, ed. Malcolm Brown (An Arbor: UMI Research Press, 1984); "The Double-Meaning of Jewish Elements in Dmitri Shostakovich's Music," in *Musical Quarterly* 71 (January 1985): 68–81; "The Unpublished Volumes of Moisey Bregovsky's Jewish Musical Folklore," in *Israel Studies in Musicology* 4 (1987): 125–144. Laurel E. Fay, *Shostakovich: A Life* (Oxford: Oxford University Press, 2000). Timothy Jackson, "The Composer as Jew," in *Shostakovich Reconsidered*, ed. Dmitry Feofanov and Allan Ho (London: Toccata Press, 1998). Nelly Kravetz, "Shostakovich-Vajnberg: The Jewish Songs in the Echo of Folk Idiom" (unpublished paper given at "*Shostakovich 25 Years On" Symposium* (Glasgow, Scotland), October 2000); "*From Jewish Folk Poetry* of Shostakovich and *Jewish Songs* op. 17 of Weinberg: Music and Power," in *Dmitri Schostakowitsch und das jüdische musikalische Erbe*, ed. Ernst Kuhn (Berlin: Ernst Kuhn, 2001). Ian MacDonald, *The New Shostakovich* (Boston: North Eastern University, 1990); "Shostakovich vs. Fay: Whose Stupidity," in *Eastern European Jewish Affairs* 26 (1996): 5–26. Dorothea Redepenning, "And Art Made Tongue-Tied by Authority: Shostakovich's Song-Cycles," in *Shostakovich Studies*, ed. Philip Furia (New York, NY: Cambridge University Press, 1995). Boris Schwarz, *Music and Musical Life in Soviet Russia, 1917–1970* (London: Barrie & Jenkins, 1972). Esti Sheinberg, *Irony, Satire, Parody and the Grotesque in the Music of Shostakovich* (Aldershot: Ashgate Publishing, 2000). Robert Stradling, "Shostakovich and the Soviet System: 1925–1975," in *Shostakovich: The Man and his Music*, ed. Christopher Norris (Boston and London: M. Boyars, 1982). Richard Taruskin, *Defining Russia Musically: Historical and Hermeneutical Essays* (Princeton: Princeton University Press, 1997). Solomon Volkov, *Testimony: The Memoirs of Dmitri Shostakovich* (New York: Harper & Row Publishers, 1979). Vladimir Zak, "Shostakovich's Idioms," in *Shostakovich Reconsidered*, ed. Dmitry Feofanov and Allan Ho (London: Toccata Press, 1998); "Jüdisches und Nicht-Jüdisches bei Dmitri Schostakowitsch," in *Dmitri Schostakowitsch und das jüdische musikalische Erbe*, ed. Ernst Kuhn (Berlin: Ernst Kuhn, 2001).

[2] Shostakovich met and developed a friendship with Mojsej Vajnberg in 1943. The two composers made it a custom to show each other works in progress. Kravetz argues that Shostakovich was familiar with Vajnberg's *Jewish Songs*, Op. 13 (1943) and Op. 17 (1944). Kravetz, "Shostakovich-Vajnberg: The Jewish Songs in the Echo of Folk Idiom" and "*From Jewish Folk Poetry* of Shostakovich and *Jewish Songs* Op. 17 of Weinberg: Music and Power."

[3] Collecting Jewish folk music for twenty years in Ukraine, Mojsej Beregovskij had transcribed hundreds of *klezmer* pieces into an authoritative collection, which became the basis for his doctoral dissertation "Evrejskaja narodnaja instrumental'naja muzyka/Yidishe instrumentale folks-muzik" [Jewish Instrumental Folk Music]. In 1944, Beregovskij defended his dissertation at the Gosudarstvennaja Konservatorija in Moskva, where Shostakovich

was teaching at the time. In 1948, Shostakovich for months sheltered Beregovskij, by then a condemned "enemy" of the Soviet State, in his Moskva apartment. See Izaly Zemtsovsky's introduction to Beregovski, *Jewish Instrumental Folk Music: The Collections and Writings of Moshe Beregovski*; also see MacDonald, "Shostakovich vs. Fay: Whose Stupidity," 24.

[4] Shostakovich received his most intense exposure to Jewish music during a four-year contact with his composition pupil Veniamin Flejshman (1913–1941). In 1944, Shostakovich completed and orchestrated Flejshman's opera *Skripka Rotshil'da* [Rothschild's Violin].

[5] Gnessin, interested in traditional Jewish music and the *commedia dell'arte* tradition, titled his music "The Jewish Orchestra in the Ball at the Mayor's House: A Grotesque." The music brought to the fore the dramatic incongruity between the impetuous dance of the ball's participants and their forthcoming embarrassment expressed in a mute pause by juxtaposing the incompatible musical contexts, that of the Jewish *klezmer* music and of the nineteenth-century social dance-forms. See Sheinberg, *Irony, Satire, Parody and the Grotesque in the Music of Shostakovich*.

[6] Fay, *A Life*, 169.

[7] Volkov, *Testimony: The Memoirs of Dmitri Shostakovich*, 156.

[8] For the list of scholarly sources that hold this discussion, refer to footnote No. 1.

[9] Beregovski, *Jewish Instrumental Folk Music*, 17.

[10] Mark Slobin, "Evolution of a Musical Symbol in Yiddish Culture," in *Studies in Jewish Folklore*, ed. F. Talmadge (Cambridge, MA, 1980), 315.

[11] Beregovski, *Jewish Instrumental Folk Music*, 15.

[12] Abraham Z. Idelsohn, *Thesaurus of Hebrew Oriental Melodies* (Berlin: Benjamin Harz, 1923-32/reprint: Cedarhurst, NY: Tara Publication, 1999), IX, x.

[13] Slobin, "Evolution of a Musical Symbol in Yiddish Culture," 315.

[14] Idelsohn, *Jewish Music in its Historical Development* (New York: Schocken Books, 1967), 184–190; Beregovski, *Jewish Instrumental Folk Music*, 17.

[15] Henry Sapoznik, *The Compleat Klezmer* (Cedarhurst, NY: Tara Publications, 1988), 21.

[16] Slobin, "Evolution of a Musical Symbol in Yiddish Culture," 315–316.

[17] Its Middle Eastern counterpart goes under the name *hijaz*.

[18] Jurij Holopov, "Lad" [Mode], in *Sovetskaja muzykal'naja enciklopedija* [Soviet Music Encyclopedia] (Moscow, 1976), III, 131.

[19] Alexandr Dolzhanskij, "Alexandrijskij pentakord v muzyke Shostakovicha" [Alexandrian Pentachord in Shostakovich's Music], in *A. Dolzhanskij: Izbrannye stat'i* [Selected Articles] (Leningrad: Muzyka, 1966), 86–113, also see Ellon DeGrief Carpenter, "Russian Theorists on Modality in Shostakovich's Music" in *Shostakovich Studies*, ed. Philip Furia (New York: Cambridge University Press, 1995), 92–97.

[20] Dolzhanskij, "Alexandrijskij pentakord v muzyke Shostakovicha," 87.

[21] Ibid., 90.

[22] Sections of music in this paper are designated by movement and rehearsal number, e.g., 4/R78 means the fourth movement, at rehearsal number 78. 4/R78-2 signifies two measures before rehearsal 78.

[23] Enumeration of degrees here is according to the twelve-tone scale.

[24] Volkov, *Testimony: The Memoirs of Dmitri Shostakovich* (New York, 1979), 156.

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Santrauka

Kultūrinė egzotika ar meninė struktūra?
„Žydiškumo" apraiškos D. Šostakovičiaus muzikoje

Žydiškos intonacijos Šostakovičiaus muzikoje anksčiau buvo suprantamos pirmiausia kaip politinės ir istorinės potekstės, beveik nesidomėta jų muzikine puse. Šiame pranešime teigiama, kad žydiškomis intonacijomis pagrįstos derminės struktūros kompozitoriaus kūryboje atsirado ir plėtojosi veikiau kūrybinio proceso metu, o ne vien tik dėl istorinių aplinkybių. Naujų dermių atradimas, jungiant tarpusavyje jau egzistuojančias, buvo didelis kompozitoriaus pomėgis, nustelbęs jo domėjimąsi tradicine mažoro-minoro sistema. Čia analizuojami specifinės Šostakovičiaus kūryboje randamos dermės bruožai (ją penktąjį dešimtmetį identifikavo rusų teoretikas A. Dolžanskis) ir, atkreipiant dėmesį, kad ji dažnai išplėtojama į didelę derminę struktūrą, atskleidžiamos plačios derminės jos galimybės.

Šostakovičiaus kūryboje žydiškos intonacijos yra daugiau nei paprasčiausios kopijos, pasiskolintos iš žydų muzikos lobyno. Jos panašios į originalias paties kompozitoriaus dermių plėtotes, kurios jo paletėje atsirado, chromatiškai deformuojant tradicinius garsaeilius. „Žydiškais" laikomų kūrinių potekstėms iš savo dermių rinkinio Šostakovičius ėmė tokias stilizacijas, kurios pagal jo klausytojo kultūrinį suvokimą galėjo skambėti panašiai kaip žydų muzika. Tai galėtų patvirtinti citatų iš kūrinių, kurie niekada nebuvo laikomi turinčiais žydiškų intonacijų, analizė. Palyginti su ištraukomis iš minėtos kategorijos kūrinių, šiose citatose gausu identiškų derminių formulių.

Fernando Martín Pastor

The Perception of a Dynamic Time: Carter's 'Riconoscenza per Goffredo Petrassi'

Over the last 20 years, Elliott Carter has mainly written chamber music and short solo pieces. At the same time, the American composer has simplified enormously his music's means and procedures. 'Riconoscenza per Goffredo Petrassi' for solo violin is a good example of Carter's late style and his different ways to create narrative through the use of different pitch-class sets and temporalities, as this paper will briefly show.

As a solo piece, Carter exploits to a maximum the possibilities of the violin in order to create different materials that contrast with each other in speed, register, texture, timbre, dynamics and pitch content. However, the most interesting feature of the piece is how these contrasting materials define 3 different perceptions of time that grow and expand together in a large scale polyphony of gestures.

Context of the Piece

'Riconoscenza per Goffredo Petrassi' was the third piece of a series of short works for solo instrument or small chamber group that Elliott Carter started in 1983, being his last piece for this genre 'Au Quai' (2002) for bassoon and viola. Among this set of works, we find three recent violin solo pieces: 'Statement, remembering Aaron' (1999), 'Fantasy, remembering Roger' (1999) and 'Rhapsodic Musings' (2000). 'Riconoscenza' ('Gratitude') was written in 1984 for the 80th birthday of the Italian composer, Goffredo Petrassi. Carter wrote in the program notes of the premiere: 'He [Petrassi] has tried to get a sense of an unpredictable spontaneity in his music, and sometimes it becomes very fragmented, as though he wrote little bits of music which, when assembled, contrast surprisingly with each other. I love his music'. The piece is a real homage to Petrassi whose rhapsodic quality is taken as a starting point; The Italian Master died in March 2003, the 'spontaneity' of his works still remain as fresh as this small homage of Elliott Carter, his 'Riconoscenza'. The piece is becoming part of the violin repertoire and has been recorded in several occasions.

The Characters of the Plot

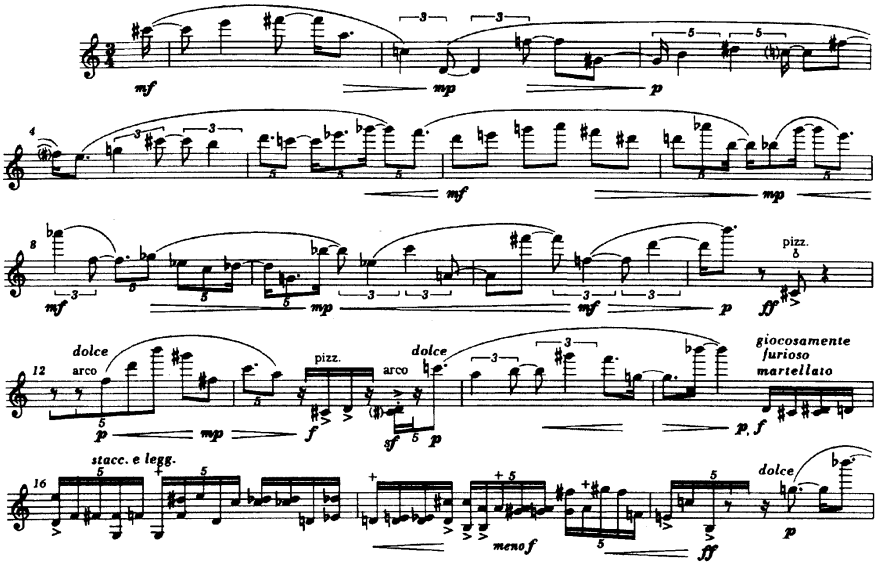
The idea of using different characters in his instrumental music and the establishment of a plot between the instruments was contemplated by Carter in the early 1940s and was especially important in his 2nd String Quartet. Carter used to compare his plots to the dramatic approach of Mozart in his late operas. As J. Bernard (1994) points out: 'Carter's concern to express "character" and "behavior" brings to his work a notably human aspect; that the collective exigencies of his music can never, in the end, suppress the individual voice is, for the listener, a source of deep involvement and satisfaction'. The different characters of the piece are:

a) The 1st material or the 'Unsteady-pulse Melody' (mm. 1–15). It consists of a long melodic line whose durational framework oscillates in speed by the use of different figures. These figures are grouped to define different *tempi* or pulsation of a metrical grid; the change of figure implies a contraction or expansion of the previous *tempo* (*tempo* modulation) and introduces *accelerando* and *ritardando* patterns, a typical means of the American Composer (Double Concerto, 1961). These patterns give the melody a degree of flexibility that matches the 'Quasi Improvvisando' style that Carter marks at the beginning of the piece. The speed oscillates between the figures of an eight-note triplet (shortest value) and a quarter-note quintuplet, a middle speed in the piece that is always juxtaposed to the 2 other temporalities.

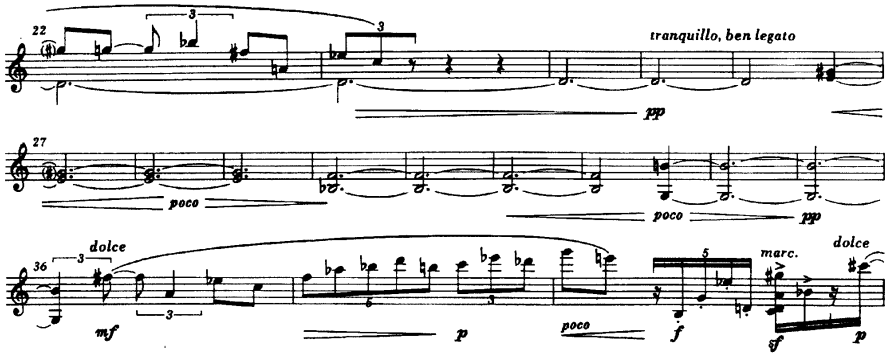
b) The 2nd material or the 'Explosive Gesture' (mm. 16–18). It is a fast and continuous passage that confronts the 1st material with an almost steady figure (sixteenth notes and sixteen note quintuples) and a new pitch set: whereas the first material is organized through a 7-note set included in the octatonic scale, this gesture is highly chromatic. The register, articulation (*staccato*) and dynamic (*forte*) are also different. It also deploys the left hand *pizzicato*, a new timbre effect.

c) The 3rd material or the 'Contemplative Dyads' (mm. 25–36). It contrasts with the two others through its extremely slow pace, double step chords, *legato* articulation and *pianissimo* dynamic. The register is now the lowest of the violin. Its abrupt change of speed destroys the feeling of pulse and metrical grid created by the two other materials. The perception of the passage is that of contemplation. Example 1 and 2 show the different temporalities or characters of the piece:

Example 1. Materials A and B; beginning of *Riconoscenza per Goffredo Petrassi.*



Example 2. Material C; mm. 23–35.



Carter, therefore, bases this piece upon 3 philological perceptions of time:

1) Time as process (dynamic), associated to the 'unsteady-pulse melody' (A);

2) Time as a continuous, associated to the 'explosive gesture' (B);

3) Time as contemplation (static), associated to the slow dyads (C).

From this perspective we see the frequent 'interference' of B in the course of the other two materials in order to establish a referential *tempo* to be destroyed. This is particularly effective in the last section in mm. 104–106, the final dissolution of the fast gesture.

Analysis of the Piece

The piece is divided in 3 Sections following this permutation of materials:

1st Section (mm. 1–24): A (1–15) – B (15–18) – A (18–24)

2nd Section (mm. 25–82): C (25–36) – A (36–41) – C (41–46) – A (46–51) – C (51–66) – A (66–78) – C (78–82)

3rd Section (mm. 82–121): B (82–92) – A (92–103) – B (103–106) – C (106 – 121)

The 1st Section exploits contrast between A and B. The 2nd section juxtaposes and finally integrates A and C. Finally, the 3rd one reaches to the climax of the piece (m. 91); after this point, a final reprise occurs and the tension is gradually release.

Besides this apparent conventional form, it is worthy to notice:

1) Since the 1st material A is present throughout, it is the presence of the 2 other characters, which articulates the form. This is quite remarkable in the sense that the music form is not just defined by the actual presence of a character but also by the absence of others.

2) Carter's tendency to overlap sections and phrases is quite remarkable in this case. In order to allow the music flows, 1st and 2nd sections are not clear-cut. The overlap occurs between measures 21–25: the open string D is set in the background with a softer dynamic and works firstly as a pedal note, to become later the beginning of the new material. Something similar happens with the anticipations of C# and C#– D in mm. 11 and 13, respectively. This differentiation of intensity and activity between layers suggests the idea behind the composition: the piece is a complex polyphony of layered materials ordered successively (instead of superimposed like in most works of Carter's production, due to the nature of the solo instrument).

3) Besides the previous overlaps and anticipations that foreshadow new events, there is also 'interference' of characters, or moments in which gestures related to a character seem to 'jump into' the monologue of another. This effect can be seen as an application of Eisenstein's 'cutting and continuity' technique, a cinema influence in his music. As J. Bernard (1995) points out, Carter was impressed by the creativity of Sergie Eisenstein's movies in the 1920s, and his inventive narrative: 'There was a whole period of the Russian cinema that developed very interesting kinds of cross-cutting. The idea, for instance, of stopping an action just before its culmination, which is something that I've done in a number of pieces, was something that I thought was very remarkable. So it certainly has had an influence on me' (E. Carter in interview with F. Lesh).

The 'interference' of characters in 'Riconoscenza' is related to the 2nd material, the most gesture related. It is under this 'cutting and continuity' technique that we can understand the presence of B in the context of A in m. 38; their subsequent quasi-dialogue in mm. 46–51; and their final integration after the climax in mm. 92–95 and 103–106.

This technique of 'cutting and continuity' is also used in a larger scale in order to connect a material through time. In the 1st section, the juxtaposition of materials breaks the continuity of each character, creating the mentioned 'rhapsodic quality'. There is, however, a clear connection through time between the different returns of the materials. This is achieved by the use of similar notes or melodic profiles at the end of an 'interrupted' material and at its new beginning. This means is used in mm. 14–15, where the melodic ending of A is connected to its return in m. 18, four bars later. The same ideas is used in the 2nd section between m. 22–23 and m. 36; mm. 40–41 and mm. 46–47; and finally between m. 51 and m. 66. The 3rd material deploys a similar means in mm. 44–46, and mm. 51–53. At the end of the 2nd section, this technique is gradually abandoned and the materials seem to integrate more by sharing pitches and relating to the others, creating a more straightforward continuity, as in mm. 78–80.

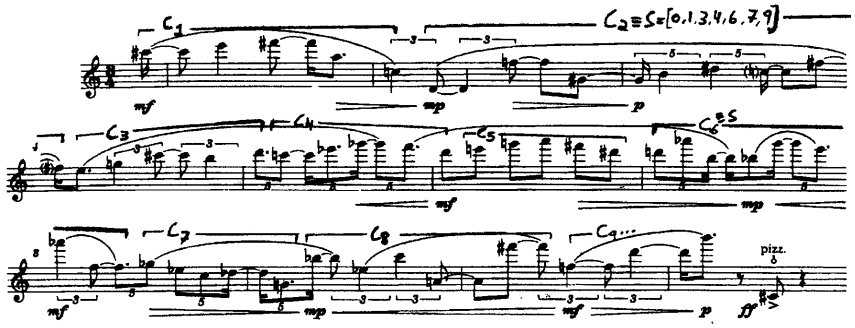
4) There is a co-evolution in the growth of all the materials. The term 'co-crescere' (literally 'to grow together') was coined by Alfred N. Whitehead to describe different processes related to organisms in the Biological world. It was introduced by this philosopher to a young Carter at Harvard and has been a major influence in his work since then. D. F. Breedon (1975) and D. Ungar (2005) have discussed the influence of Whitehead in Carter's dramatic forms. In an interview with A. Edwards, Carter says: 'As far as I am concerned [...], what contemporary music needs is not just raw materials of every kind but [...] works whose central interest is constituted by the way everything that happens in them happens as and when it does in relation to everything else'. On his Second String Quartet (1959), Carter comments: 'As the piece progresses, the diverse 'characters' of the beginning come to influence each other and the repertoires of each 'actor' begin to be shared. The work progresses through a climax involving each instrument's sharing the repertoires of each of the other instruments to an ending...'' (Carter, 1965).

In 'Riconoscenza' two of the characters fully develop and grow together throughout the 2nd section: C and A have their longest phrases at the end of this section (m. 51–66) and (m. 66–78), respectively. The return of B at the beginning of the 3rd section drives the piece to its climax. This 'explosive' moment matches both the natural growth process of this material and the 'co-crescere'-scheme set from the previous section. After this moment the characters seem to integrate and the tension is gradually released.

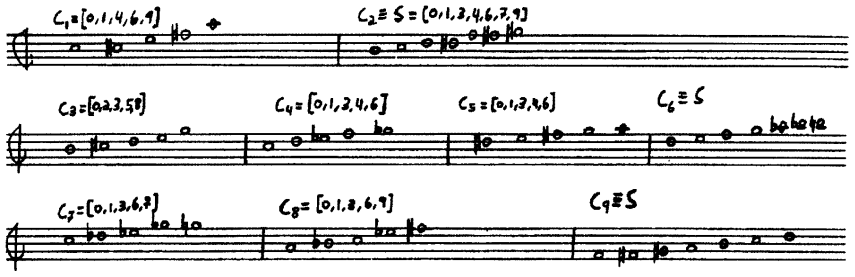
Sets and Subsets: functionality

The pitch content of the different materials reveals an interesting association of speed and tonal stability: the unsteady pulse (A) brings the pitch-class set of the piece and its smaller subsets. The fast, dynamic continuous (B) is associated to the chromatic scale. Finally, the slowest material (C) is linked to two fixed dyads. Carter has used other pith systems during the last years like the all-interval hexachord, the all-trichord hexachord or the all-interval tetrachord (Budelier, 2004). His approach to pitch-class set, however, is different than that of the main theorists, Forte or Lewin. Carter considers the set and its inversion as different possibilities (Carter, 2002) differentiating the real interval distance (a major 3rd is considered different from a minor 6th) and the octave displacement (a major 3rd is not equivalent to a major 10th) (M. Andrew, 1994).

Example 3a. Collections and groupings, mm. 1–10.



Example 3b. Collections.



An important feature of the piece is the dynamic use of two difference pitch systems: the octatonic sonority against the chromatic one. The main set of the piece is S=[0,1,3,4,6,7,9] (Example 3), a 7 note-set included in the octatonic scale that might have been a kind of dedication to his admired Petrassi. All the sets used in the piece (except those in the chromatic passage) are related to this one and are therefore a transposition, an inversion or a subset of this one. The use of the set is linked to the grouping and phrasing and has a structural significance in the way the piece is articulated (see in Example 3 how the first sets of the piece coincide with the phrasing).

In this association of materials and pitch, the 1st material is the only one that is not fixed and has the potential to develop. In the 1st section, it is linked to 5-note subsets and the whole set. After the chromatic gesture (B), the return of A is built on 6-note subsets. It is not until the 2nd section where 4 note-subsets are first introduced and later juxtaposed against 5-note subsets and finally the whole set. The 3rd section deals with these same cardinal subsets, developing their internal relationship.

It is relevant to mention that there are different intervals associated to the materials: the double-stops are associated to the held chords and are fixed throughout the piece. These dyads consist of an alternation of a major 3rd and a perfect 5th (see in Example 3 how these 4 notes represent also a 4 note-subset of S). These intervals are classically perceived as the most consonant, reinforcing the static character of the 3rd material. In an interview with F. Lesh, Carter says: 'certain intervals, of course, have more tension than others, and I use all of these techniques. But I am very old-fashioned in that particular sense that I like to have the music move [...], having a propulsive line from beginning to end'.

Other intervals have also a specific function: the minor 3rd is the recurrent interval of A and its sequential use introduces the tritone (see the passage mm. 5–11). The semitone is the main interval of the chromatic gesture. The end of the piece introduces a pedal note, the note C (m. 101–121), as a way of stabilization.

Tempo and Tonal Stability

As J. Bernard (1995) has observed, 'One of the main musical achievements of Elliott Carter is his handling of time'. After the previous discussion, it seems, however, that time is coupled to pitch stability to define a more forward-looking line.

Example 4 shows the temporal evolution and pitch content of A in 4 different passages. The main idea of these passages is an *accelerando-rallentando*:

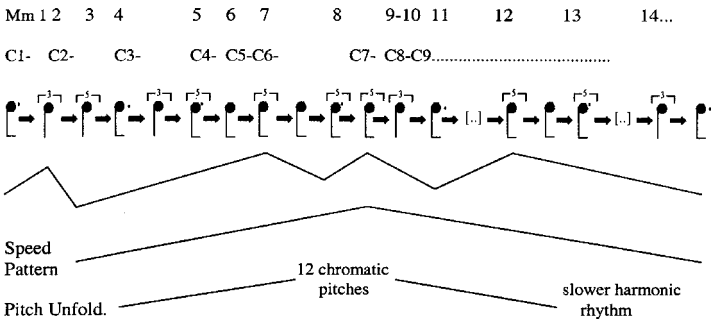
The first passage (mm. 1–15) speeds up in tempo within the sequence mm. 4–7. This sequence is linked to the introduction of the 12 chromatic notes (sets 3–6, marked as S3–S6 in the example) and foreshadows the chromatic gesture, B. After this increase of speed and instability, a *ritardando* follows. The *ritardando* is coupled to the return of the whole set (Sets 7 and 8) and a slowdown of the pitch unfolding (Sets 9–10).

The second passage (mm. 18–23) consists of a big accelerando followed by a small 'detour'. The *accelerando* brings 11 chromatic notes and the 'detour' is again a slowdown in chromatic activity that leads to the held chords.

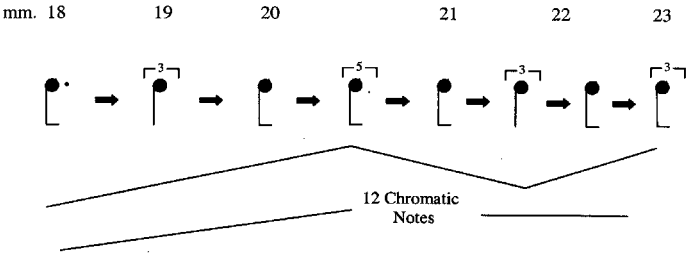
The third and fourth passages (mm. 36–41 and mm. 66–78) can be analyzed in a similar way. Both the tempo profile and the pitch profile follow the same tensional pattern. **This analysis shows a clear association between temporality and stability in the piece in order to achieve formal growth.**

The process of growth of the two other materials is easy to follow: C grows by the increase of rhythmic and harmonic activity. This growing process is associated in time to the growth of A ('co-crescere') at the end of the 2nd section, and drives the piece to the climax in the next Section. The 'explosive' gesture, B, presents an increase of length, speed, registration and density in relation to its 1st appearance. This way, B leads the piece to its climax and the growing process to an end.

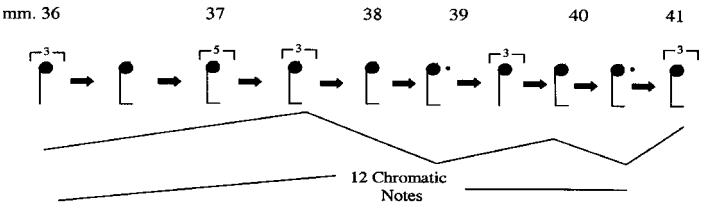
Example 4a. Tempo and pitsch evolution.
Passage 1, mm. 1–15.



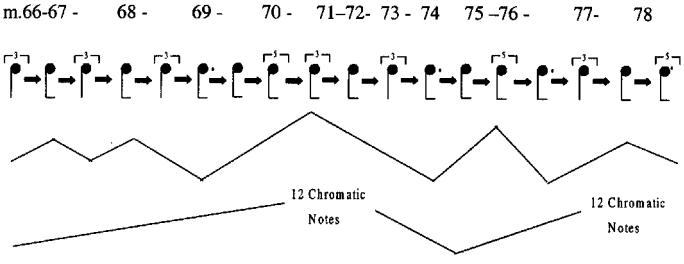
Example 4b. Passage 2, mm. 18–23.



Example 4c. Passage 3, mm. 36–41.



Example 4d. Passage 4, mm. 66–78.



Conclusion

Despite the limitation of a solo instrument, Elliott Carter is able to create in this piece a large-scale polyphony of layered materials. These materials define three different temporalities as characters of an intricate plot: after a rhapsodic beginning, the three characters converse with each other, fuse and develop creating a compact and 'organic' form. The plot shows an imaginative solution to accomplish this goal, driving its dynamic and psychological perception by its managing of time and continuity through time ('cutting and continuity technique') and establishing a correlation of growth of its characters ('co-crescere' technique). Besides the dramatic or theatrical influence behind the piece, these techniques add two new perspectives: the original narrative of the cinema of Sergie Eisenstein and concepts of the organic world of Alfred N. Whitehead, both of them major influences of Carter. Different pitch-class sets and intervals are linked to each of these structures, but above this, a larger formal plan is set: **Temporality and stability are coupled to define a directional vector which drives the piece to expand its content towards a climax, and integrate its contrasting materials.**

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Santrauka

Analitinis požiūris į vėlyvąjį E. Carterio stilių

Per pastaruosius 20 metų, po septintąjį ir aštuntąjį dešimtmečius trukusio eksperimentinio kūrybos laikotarpio, E. Carterio muzika tapo gerokai skaidresnė. Supaprastėjus muzikinėms priemonėms, kompozitoriaus stiliui tapo būdinga subtili harmonija ir garso aukščio tvarkymo technika.

Pranešime analizuojama, kaip Carteris naudojo motyvus ir submotyvus bei priemones perteikdamas kryptingumą ir pasakojamąjį charakterį, kontrastingai gretindamas chromatiškai prisodrintus ir tonaciškai pastovius epizodus. Tai pasiekiama poliarizuojant garsus ar submotyvus. Susieti šiems priešingiems būviams taip pat pasitelktos ir kitos priemonės, pvz., bendri garsai. Šie tvirtai į šiuolaikinį repertuarą įėję kūriniai yra nepaprastai dinamiški.

Stephen Downes

F. Poulenc's Compositional Diary: A Source for Analysis of Creative Process and Hermeneutic Interpretation

Francis Poulenc appears to have destroyed most of his compositional sketches. Only a very small number have so far been located. The setting of Apollinaire's 'Montparnasse' is typical in that only a signed manuscript copy with minor corrections is known to exist (it is now held in the Pierpont Morgan Library, New York).[1] If we are to glean insights into creative practice given such circumstances then we must turn to the composer's written accounts of compositional process. In the case of this song Poulenc wrote a detailed chronology of his protracted engagement with the poem, which not only offers a valuable account of compositional process, but also, through its revelation of the composer's poetic predilections, allows us to move from analysis, through consideration of inspirational factors, into hermeneutic interpretation. Furthermore, the recent publication of the full, 'uncensored' text of the *Journal* allows this interpretative project rich new dimensions.[2]

'Montparnasse' is an autobiographical poem (1911–12) in which Apollinaire depicts his arrival in Paris. It describes the itinerant artist as an absurdly hirsute yet angelic figure, loitering in the hotel doorway:

O porte de l'hôtel avec deux plantes vertes	[O door of the hotel with two green plants
Vertes qui jamais	green which will never
Ne porteront de fleurs	bear any flowers
Où sont mes fruits Où me planté-je	where are my fruits where do I plant myself
O porte de l'hôtel un ange est devant toi	O door of the hotel an angel stands in front of you
Distribulant des prospectus	distributing prospectuses
On n'a jamais si bien défendu la vertu	virtue has never been so well defended
Donnez-moi pour toujours une chambre à la semaine	give me for ever a room by the week
Ange barbu vous êtes en réalité	bearded angel you are really
Un poète lyrique d'Allemagne	a lyric poet from Germany
Qui voulez connaître Paris	who wants to know Paris
Vous connaissez de son pavé	you know on its pavement
Ces raies sur lesquelles il ne faut pas que l'on marche	these lines on which one must not step
Et vous rêvez	and you dream
D'aller passer votre Dimanche à Garches	of going to pass your Sunday at Garches
Il fait un peu lourd et vos cheveux sont longs	It is rather sultry and your hair is long
O bon petit poète un peu bête et trop blond	O good little poet a bit stupid and too blond
Vos yeux ressemblent tant à ces deux grands ballons	your eyes so much resemble these two big balloons
Qui s'en vont dans l'air pur	that float away in the pure air
A l'aventure	at random]

Poulenc's description of the protracted genesis of his setting in his *Journal de mes Mélodies* is highly revealing:

> It took me four years to write 'Montparnasse'. I have no regrets for the care I took over it for it is probably one of my best songs ... . I found the music for the line "Un poète lyrique d'Allemagne" at Noizay, in 1941.
>
> All the end part (after "Vous connaissez de son pavé") at Noizay in 1943.
>
> The first two lines, in 1944, in Paris. Several lines still remained including the terribly difficult: "Donnez-moi, pour toujours, une chambre à la semaine".
>
> This came to me during the flight to Noizay, in 1943.
>
> After this I let these fragments macerate and perfected the whole in three days, in Paris in February 1945. This way of working in fits and starts may be surprising. Nevertheless it is quite customary with me where songs are concerned ...
>
> As I never transpose music which I have just conceived for a certain line, or even for several words, into another key to make it easier for myself, it follows that the linking up is often difficult and I need to stand back in order to find the exact place where I am at times obliged to modulate.[3]

This describes a compositional process which is based on what seem to be randomly inspired settings of individual or groups of poetic lines composed in no particular order. The final paragraph identifies Poulenc's main 'post-inspirational' compositional problem, the blending of the fragments so produced (a task which firmly distances him from the technique and aesthetic of surrealist collage). The point of entry for Poulenc's creative musical response to the poem is, however, very significant, as it is the central poetic invocation of the figure of the artist – the autobiographical subject of Apollinaire's text. To start the compositional process at this point suggests an act of identification on Poulenc's part with the poet. Poulenc sets this as an arching V-I-IV phrase in E minor. The local tonic chord is, typically for Poulenc's style, a ninth chord, with the piano and voice climactically emphasizing the F# ninth. This expressive highlight is introduced by a piano arpeggiation, marked 'très à l'aise', which peaks at the instruction that the pianist reach for the top note with the left hand over the right. The manner of articulation and the performing gesture mark this sensual moment as physically pleasurable, one to be savoured, embraced or displayed. Poulenc's description of how this music was 'found' [*trouvé*] is suggestive of a recovered *objet sonore.* In the completed song, however, this found E minor tonality is unstable and ephemeral, for at the beginning of the passage which follows, composed in 1943, the harmony quickly shifts to the dominant of Eb (b. 38), the tonic of the completed song. But in the first part of the song, the final fragment to be composed, some three years later, there is also a subtle process of preparation for the E tonality. A melancholic, chromatically descending three-note figure in the second poetic clause (bb. 4–5; 'avec deux plantes vertes') – a motif which will later be much developed – ends on Cb. In bars 7–8 this pitch forms part of a triad of Cb-Fb-Ab, dissonantly positioned over the Eb pedal as the poem tells of the lack of blooms. In functional, tonal terms this is flat supertonic harmony, which moves to the dominant of Eb over the continuing tonic pedal. However, the Fb triad's combination with the Eb enharmonically anticipates the E major seventh (E-G#-B-D#) which at bar 22 begins a cycle of fifths whose goal is C (b. 26). This is the setting of the 'difficult' line which he had composed a year earlier, in 1943. Thus the modulation between fragments, one of Poulenc's primary compositional concerns, is achieved through the subtle preparation of the inspirational source phrase in E minor.

Let us return to the compositional starting point. Seventh and ninth chords are, of course, pervasive in Poulenc's music. They have a dual provenance, one in the refined harmonic world of Ravel and Debussy and another in the chordal idiom of popular urban musics. This suggests an ambivalent relationship between high and low worlds. In Poulenc these beloved harmonies are imbued with an especially melancholic character through their placement, as in this song, at moments of disjuncture, or through apparent allusion to a past expressive function. The E tonal centre found within a song in Eb minor is an attempt to rise above the key of the city, and also to connect in amorous relationship. But the expressive quality of the phrase is poignantly alienated.[4] The E minor chord with added seventh and ninth is poised between redemption and abjection. The chord is fetishized, invested with superabundance of significance, just as its meaning and stature is questioned as a (re)discovered fragment, embodying the melancholic figure of the lost poet in an alien modern metropolis. Unsurprisingly, in the second half of the song there a number of nostalgic recollections of this E minor harmony. After the disappearance of the E minor vision, the harmony suggests a slip back to the dominant of E minor (b. 48), but the chromatic descents and circles of fifths resume and pull the music away from this allusion. The close of the final vocal line (b. 64ff) is an exquisite harmonic progression, a symmetrical prolongation of the tonic Eb minor (Eb minor through G [V of C] and Cb [enharmonic V/e] than back to Eb minor), with the voice outlining a descending Eb-B-G-Eb augmented triad. This sequence, which parallels the 'aventure' of the text and also encapsulates the main tonal events of the song, begins to repeat, only to stall on the dominant seventh on B (b. 68) a last recollection of the E minor inspirational image. The piano coda offers a hushed, low-registered chorale around C major seventh. But the final arpeggiation, where the left hand plays 'dessus', 'céder', recalls, at least for the performers, the concert audience or the listener reading the score, the expressive figure of the 'poète d'Allemagne'.

This image of the melancholic creative artist, around which the song turns, is paradigmatic for Poulenc's works, and I believe that Poulenc's identification of this as the source of compositional process in 'Montparnasse' is therefore revelatory for the analysis and interpretation of other important song settings of similar character. I will illustrate this by now turning to a later Apollinaire

setting, one where at the corresponding poetic and musical turning point, Poulenc lovingly and nostalgically raises his dead Muse.

In Poulenc's erotic, urban pastoral the pleasures of idyllic or illicit relationships are played out in the city's public and private spaces. Terror and anxiety strike when the voice of the beloved Other is drowned out by the din, uncannily produced or abruptly cut off by mechanical communication systems, or silenced by death. As the 'modern' communicative agencies such as the typewriter and telephone (the mechanization of the process of writing and of the voice of the Other) took the production of texts and voices out of the discourse of Romanticism[5] artists sought new creative techniques employing or stimulated by the machines of modernism. Apollinaire's experiments in spatial effects of typesetting in the collection of poems *Calligrammes* (1913–18) are a famous example. (Pierre Bernac was dismissive: he thought the 'ideograms' represented a 'puerility that adds nothing to the value of the poems but merely makes them more difficult to read'.[6]) The typographical layout of 'Voyages' as a 'Calligramme' suggests a 'severely schematic depiction of a landscape', a sense of space and recession, dislocation and distance through judicious use of type size. Thus 'the whole graphic form ... "arrests" and lays out for contemplation, in a controlled pattern, appearances that are described as evanescent.'[7] The poem concerns the flight of love, in a Dantean exile or even an imaginery descent into hell. The train moving into the distance is a favoured image of transcience. Apollinaire's juxtaposition of pastoral and technological imagery moves to expressions of personal loss. Aimless birds sit on the telegraph wires; the train travels to an unknown destination through summer woods. Modern communication networks are viewed as rather absurd, without fathomable meaning. The poem moves into an image of the gentle night, the black C depicts the moon, and the last line, 'C'est ton visage que je ne vois plus', confirms this as a song of mourning.

The typesetting generates both abstract structures, some of which may be seen to reflect the pulsations and splinters of the city, and personal symbols or lyrical or amorous import. Apollinaire's poetry derives from Symbolist exploration of the psyche and the transitory familiar from Baudelaire's description of modern life. Its inspirations are drawn from a conflict between optimism and anguish in the experience of the Parisian metropolis, the possibilities of new technology, of simultaneity and fragmentation, of the dissolution of hierarchies of high and low, but with a controlling, aspiring creative spirit at its heart. Significantly, the cover of the Heugel edition of the song cycle features the poet's name in the centre of a mirror: it is drawn from the poem 'Coeur Couronne et Miroir', an ideal portrait of the creative figure (it might be seen as a visual correlative to the compositional process of Poulenc's setting of 'Montparnasse' previously described). But this is a spirit 'haunted by uncertainty and doubt', holding an 'enduring attachment to the poetry of personal emotion and elegiac sadness', creative tensions, with self division and division from the erotic muse as major preoccupations. In his age of anxiety, the artist seeks refuge, a nostalgic comfort, a redemptive image.[8]

Poulenc's settings from 1948 transform a selection of the *Calligrammes* into a notably 'Romantic' song cycle with a unifying tonal structure (based on F#) and a balance of affective states moving towards a summarising close concerning the loss of love. Several of the poems which Poulenc set are 'hymns to women' (two are addressed to Apollinaire's muse, Marie Laurencin). A setting of 'Voyage' ends the cycle, and new personal levels of meaning accrue through the relationship of particular aspects of the musical structure to the song's dedication to Poulenc's beloved muse, Raymond Linossier. In his *Journal* Poulenc describes the song thus: 'By the interjection of unexpected and sensitive modulation, "Voyages" goes from emotion to silence in passing through melancholy and love.'[9] The central affective association of lost *amour* is the song's turning point and, I believe, a crucial inspirational source. Poulenc's compositional creativity was profoundly related to his attraction to artistically gifted women. Among such figures in Poulenc's life, Linossier, the poet Louise de Vilmorin and the diva Denise Duval were especially important.[10] The Muse functions not only a figuring of an adored inspirational Other, but also as the artist's self-confessional mouthpiece. But in Poulenc's creative mind such appeals to the beloved source of inspiration do not always seem to be heard. As Richard D. E. Burton notes in his short but insightful study, in 1928–30, 1954–5 and 1958–9, Poulenc suffered 'incapacitating breakdowns', with each crisis arising through a 'combination of artistic self-doubts and anguish over his personal relationships'.[11] The first crisis was precipitated by Linossier's rejection of Poulenc's proposal of marriage

and then exacerbated by her tragic death at the age of 32 in January 1930. She was buried with the manuscript of *Les biches* (1924) in her hands. Later in life, Poulenc was to excise many of the references to her in his *Journal de mes mélodies* when preparing the diary for publication, including the line acknowledging that 'It is not by chance that it ["Voyages"] is dedicated to the memory of Raymonde Linossier'.[12] It seems he wanted important aspects of her role in his life and art to be concealed. Clearly, this was to keep some of his most personal feelings from public airing. This is a characteristic masking tactic. In 1958, with memories of Linossier still painfully felt nearly thirty years after her death, he spoke of her with an 'emotion, concealed beneath a gentle irony and a charming cheerfulness.' Linossier was the confidante of Poulenc's formative years, and her early death symbolized his loss of youth, and he saw in her mix of secretiveness, melancholy and laughter a feminine image of himself. He was to miss her advice until the end of his days, in compositional matters as well as in affairs of the heart.[13] But she continued to function as a recovered figure of creative renewal for the composer. Many works were written in dedication or as a memorial to Linossier. As Poulenc once confessed, his music sings with 'the voice of Francis according to Raymonde', or 'it is Poulenc, but very Raymonde'.[14]

In his musical response to poetic play with the image of mechanical writing in Apollinaire's *Calligrammes* Poulenc appears to seek absolution from the fear, expressed in his letter of proposal of marriage, that without Linossier he would 'become just a machine that produces notes', the fear of creative death and also seeks to create a nostalgic image of a lost youthful life, which he so closely identified with Linossier. The elegiac tone of Poulenc's setting of 'Voyages' is established by an opening minor third motive and lamenting bass descent from the tonic F# to its dominant (F#-E-D#-D-C#) establish from the start. Throughout the song there is a subtle doubling and echoing of voices. The song begins with doublings (even treblings) of the singing voice in the piano, but this unity soon becomes lost, so that when the singer is momentarily mute the piano picks up the opening minor third and echoes it in counterpoint (bar 9ff.). It is an image of separation as well as dependency. When the pastoral scene is imagined there is a brief piano interlude in the contrasting key of Eb, marked 'très poetique et mysterieux' and played a little faster (bb. 17–19). Its texture contains two important, emotionally contradictory elements. Between the 'tenor' and 'soprano' lines there is a canon effect – a device to bring the sound of two voices tantalisingly closer together. But beneath this lies the minor third motive. Now no longer a melodic incipit, it has become a minatory and mournful bass figure, heard twice (G-Bb and Bb-Db).

The structural dominant on C# is retrieved with the poetic image of the lover's gentle night (b. 25), but it is beautifully displaced at the expression of the lost face of the beloved (bb. 29–30): a *forte* G ninth sinks to a *subito piano* Db ninth, the enharmonic of the structural dominant. Poulenc wrote that the music at 'C'est ton visage' 'must be tender and unexpected, as though the clouds had suddenly cleared to reveal a ray of moonlight', in a momentary illumination of the recalled image of Linossier, 'the irrevocable departure of a face which I have never replaced and of a beautiful, alert intelligence that I shall miss forever'.[15] The setting of this line performs a central function in the song comparable with the line "Un poète lyrique d'Allemagne" in 'Montparnasse'. Although we don't have a description of the compositional chronology of 'Voyage' the musical and poetic character of this line strongly suggests that we can locate here the primary focus of inspiration, from which the song radiated outwards. For Poulenc, the recalled image of Linossier's face was a significantly potent and highly charged source of inspiration.[16] The 1939 setting of Paul Eluard's 'Ce doux petit visage' ['Nothing but this dear little face'] is, like 'Voyage', dedicated to Linossier's memory. The sudden harmonic shift or intrusion of the dominant ninth of C in 'Voyages' recalls that this chord has a similar function as the marker of the crucial turning point in the Eluard setting (b. 18). Furthermore, the dissonances over a dominant pedal in the short piano coda of 'Ce doux petit visage' are closely comparable in their poignant effect to those which support the final poetic line of 'Voyage' – 'que je ne vois plus'. Intertextual allusion inspired by a shared poetic image and structure thus lies at the poetic heart of Poulenc's musical setting. The piano coda of 'Voyage' is replete with minor third motives in octaves, which generate a quite austere or hollow effect because of the textural 'distance' between the lines. The characteristic repeated chords in the middle register of the piano, Poulenc's favourite musically connective tissue, are notably absent. The central poetic image of the song is of the beloved face which is no longer seen. Its primary musical effect is of voices joined and separated in the context of modern,

technological alienation in a fractured, elegiac pastoral. The silence which Poulenc described as the song's destination is, of course, the consequence of the Muse's voice being muted by death.

To conclude, I propose that these observations of creative process, poetic inspiration and intertextual allusion suggest that in the late 1930s and 1940s Poulenc developed a compositional model or template for setting lyrical poems with a melancholic-erotic tone. The opening song of *Calligrammes*, L'Espionne' closely follows the model of 'Ce doux petit visage' – a plangent opening paragraph in a relatively stable minor key but with dissonances which are the seed of a sequential middle section (always replete with ninths) leading via a crucial poetic turning point to a nostalgic, bittersweet close. Other songs to follow this model include the Apollinaire settings 'La Grenouillère' (1938), 'Bleuet' (1939) and 'Hôtel' (1940).[17] 'Voyage' (1948) represents a variant of this model, one highly valued by its composer; 'Montparnasse' (1941–5) is one of this model's most complex examples, one whose pivotal moment around which the structure and expression turn is precisely that which Poulenc identified as the beginning of the song's compositional process. Thus, from such a specific description of creative work subtle and wide-ranging insights into musical structures, inspirations and meanings can emerge.

Notes

[1] See Carl B. Schmidt, *The Music of Francis Poulenc (1899–1963): A Catalogue* (Oxford: Clarendon Press, 1995).

[2] Francis Poulenc, *Journal de mes Mélodies*, edition intégrale et notes établies par Renaud Marchart (Paris: Cicero, 1993).

[3] Francis Poulenc, *Diary of My Songs*, bilingual edition with a translation by Winifred Radford (London: Victor Gollancz, 1985), 75–77 (translation modified); *Journal de mes Mélodies*, 42–3. In the Max Eschig edition the song is dated 'Noizay Septembre 41; Paris Janvier 45'. In a letter to Pierre Bernac (24 June 1944) Poulenc wrote: 'The two Apollinaire songs, 'Montparnasse' and 'Hyde Park', almost finished, apart from a word here and there.' Francis Poulenc, *'Echo and Source': Selected Correspondence 1915–1963*, trans. and ed. Sidney Buckland (London: Gollancz, 1991), 135.

[4] If Poulenc is identifying himself with this depiction of the poem's subject it is, I suggest, as a modern, urban reincarnation of Gilles, the distanced, melancholy figure in Watteau's eighteenth-century *Fêtes Champêtres*. Paul Guth compared Poulenc with this figure of Gilles; Pierre Bernac, *Francis Poulenc: The Man and His Songs*, trans. Winifred Radford (New York: Norton, 1977), 29. Gilles, a white-suited and isolated figure, who maybe an image of Watteau himself, is pictured as a 'melancholy, fearful' figure who stands outside the social pleasures of the party seen behind him; Erwin Panofsky, 'Et in Arcadia Ego', in Raymond Klibansky and H.J. Paton (eds), *Philosophy and History: The Ernst Cassirer Festschrift* (New York: Harper & Row, 1963), 251.

[5] Friedrich A. Kittler, *Gramophone, Film, Typewriter*, trans. with an introduction by Geoffrey Winthrop-Young and Michael Wutz (Stanford: Stanford University Press, 1999), 183–263.

[6] Pierre Bernac, *Francis Poulenc: The Man and his Songs*, 83.

[7] Anne Hyde Greet and S.I Lockerbie, 'Commentary', in Guillaume Apollinaire, *Calligrammes: Poems of Peace and War (1913–1916); A Bilingual Edition*, with translations by Anne Hyde Greet (Los Angeles: University of California Press, 2004), 394–5.

[8] See S.I. Lockerbie, 'Introduction: The Modernism of *Calligrammes*', in Apollinaire, *Calligrammes*, 1–20. The lines in the heart-shaped *Calligramme* in translation read: 'In this mirror I am enclosed living and real just as you imagine the angels and not at all like reflections.'

[9] *Diary of My Songs*, 95; *Journal de mes Mélodies*, 55.

[10] Keith Clifton, 'Mots cachés: Autobiography in Cocteau and Poulenc's *La Voix humaine*', *Canadian University Music Review* 22 (2001), 68–85. Clifton explores the appeal of the 'feminine' for Poulenc, placing the composer's close relationships with women in the tradition of the homosexual-straight woman 'bond', in which the intimately beloved female acts as 'surrogate sister, mother, or confidant'.

[11] Richard D.E. Burton, *Francis Poulenc* (Bath: Absolute Press, 2002), 14.

[12] Poulenc, *Journal de mes mélodies*, 54.

[13] For an in-depth portrait see Sophie Robert, 'Raymond Linossier: "Lovely soul who was my flame"', in Sidney Buckland and Myriam Chimènes (eds), *Francis Poulenc: Music, Art and Literature* (Aldershot: Ashgate, 1999), 87–139. The quotation (trans. on p. 87) is from a lecture by Yvonne Lançon, who went to visit Linossier's grave with Poulenc in 1958.

[14] Robert, 'Raymonde Linossier', 99.

[15] *Ibid*. Again the second line is a portion of text which was cut by Poulenc before publication. On the vocal performance of this line Bernac wrote: 'it is of prime importance that the moon is suddenly veiled again on the syllable "sa" of the word "visage", *pp*, with infinite tenderness and nostalgia prolonged until the end by the beautiful coda for the piano'. *Francis Poulenc*, 89.

[16] Robert, 'Raymonde Linossier', 95, 97.

[17] 'Hier' (1931) from *Trois poèmes de Louise Lalanne* might be considered a prototype. The poem is actually by Marie Laurencin, Apollinaire's lover and muse.

Santrauka

F. Poulenco kompozicinis dienoraštis – kūrybinio proceso ir hermeneutinės interpretacijos analizės šaltinis

Rašytiniai kompozitorių pasakojimai apie kūrybinį procesą dažnai (teisingai) vertinami skeptiškai ir įtariai. Pvz., Poulenco „Mano dainų dienoraštis“, išleistas šeštąjį dešimtmetį, iki tol buvo paties kompozitoriaus daug kartų taisomas. Neseniai pasirodė naujas leidimas, kuriame publikuojami ir Poulenco išbraukti fragmentai. Vienas iš įdomiausių epizodų pasakoja apie dainą „Monparnasas“ (ž. G. Apollinaire'o), kurią kompozitorius priešokiais kūrė 1941–1944 m. Poulenco pasakojimas apie kūrinio dalių gimimą ir jų jungimą į visumą tik iš dalies patvirtina kompozitoriaus tariamą artėjimą prie siurrealistinio montavimo būdo. Interpretacijai šio fragmento reikšmė dar svarbesnė: čia kompozitorius įvardijo frazę, kuri jam tapo įkvėpimo šaltiniu, poetinę idėją, kuri inspiravo kūrybinį procesą. Ja apibūdinamas eilėraščio herojus, poetas, su kuriuo susitapatina pats Poulencas. Taigi ši frazė duoda puikią galimybę įsigilinti ir į patį kūrybinį procesą, ir į hermeneutinę interpretaciją.

Shuann Chai

The Lulu Rondo: A Study of Contextual Representation

In the spring of 1934 Alban Berg was working determinedly on his new opera *Lulu* despite becoming increasingly nervous about his apparent inability to secure a venue for its premiere in the upcoming concert season. With his typical cynicism, a letter from Berg to Hans Heinsheimer at his publisher Universal Edition (UE) on May 23, 1934 indicated that the composer was assembling a "propaganda-suite" of music from *Lulu* in the event that an imminent premiere would not materialize. Berg worked on the project thereafter with uncharacteristic speed, writing to UE less than three weeks later that they would be receiving two movements of the new project sometime the following week. The five movements were completed in July and had their premiere on November 30, 1934, in Berlin.

The first movement of the *Lulu-Suite* is the Rondo, which is musically associated with the relationship between Lulu and Alwa, the son of her benefactor and third husband Doctor Schön. In its operatic setting, the Rondo is subjected to constant dramatic and musical interruptions as Lulu's numerous other suitors continually vie for her attention. These intrusions obscure both the development of Lulu and Alwa's relationship and the structure of the Rondo's underlying form. In the context provided by the *Lulu-Suite*, however, the fragmented sections of the Rondo are brought together and presented as a unified musical entity. The first part of this paper will address this and other contrasts between the operatic setting of the Rondo and its role in the *Lulu-Suite* and investigate their musical and dramatic implications. The second part of this study will re-assess the composer's motivations for creating the *Lulu-Suite*: despite Berg's apparent need for "propaganda", his strong connection to the work of literary critic Karl Kraus suggests a compelling alternative reason for the Suite's assembly that sets the five-movement work apart from other operatic concert pieces.

The Rondo's placement within the opera makes it emblematic of the romantic and sexual aspects of the relationship between Lulu and Alwa. Before the Rondo is introduced, the interactions between these two characters are characterized by Alwa's struggles with his amorous feelings for Lulu despite their familial association as adoptive siblings. His romantic yearnings, however, are idealistic and one-sided: Lulu is, and has been for some time, the willing subject of his idolatry while recognizing how easily he could be manipulated. The Rondo begins in measure 243 in Act Two, marking the pivotal scene where Alwa, unable to bear the tension within, admits to his desire for Lulu even though she is now his father's wife. Here, Lulu has invited Alwa to meet her at the family house before going out for a matinée; instead, upon his arrival, she greets him in a low-cut dress and begins to seduce him. What proceeds is a scene with a remarkable array of musical and dramatic distractions as the seduction takes place in the covert presence of all her other lovers, hidden among the screens, doors, and tablecloths in the same room.

The dialogue moves between Lulu's flirtatious comments to Alwa, leading him on, and his cautiously guarded and respectful replies that belie his fundamental attraction to her. The tension that would have resulted from his disciplined restraint and her overcoming of it is broken by a stream of ill-timed distractions: the entrance of the Manservant as he brings and removes their hors d'oeuvres, Doctor Schön's incredulous asides as he observes his manservant's behavior and son's betrayal, and the Athlete peeking out from behind the curtains. Alwa, for his part, expresses his exasperation with the Manservant's intrusions, but after he capitulates to the momentum of Lulu's seduction he becomes perfectly unaware of the near-comical events happening on stage all around him. In proclaiming his love, he lies blissfully overcome with his head in Lulu's lap as she absently strokes his hair before abruptly declaring, "I poisoned your mother." The Rondo then breaks off as Doctor Schön makes his presence known and Lulu's paramours attempt to flee from their hiding places. Chaos ensues onstage, and the action culminates in murder as Lulu fires five gunshots into her husband's back. The disastrous scene ends with the arrival of the police and Lulu's arrest.

The development and recapitulation of the Rondo takes place two years after that chaotic evening, as the couple recommences their relationship exactly where they left it prior to Lulu's incarceration. In contrast to the Rondo's fragmented exposition, the only operatic interruption in the remainder of the Rondo is a spoken paragraph over a B-flat open fifth in measure 1021 detailing Lulu's elaborate escape from prison. The difference in pacing makes the continually escalating music all the more passionate as it accompanies the consummation of their relationship. Here, Lulu's seduction of Alwa is unmediated by the fact that their tryst takes place in the very room – in fact upon the very sofa – where Doctor Schön bled to death. Her affected nonchalance in observing the coincidence and Alwa's passive unwillingness to face her pronouncement indicate his final capitulation to her wiles.

The relationship's period of romance ends with Act II, and from thereon a brutal reality sets into the opera's narrative. As fugitives from the law Lulu and Alwa flee to London, where, desolate and completely broke, all the glamour in their relationship has faded, much like Lulu herself. Alwa, completely infirm, complains about the venereal disease that he caught from Lulu while she, having no outward symptoms of her condition, begins her short-lived career as a streetwalker. When a client argues with Lulu about money, Alwa intercedes on her behalf and is killed with one brutal blow to the head. Far from showing any signs of shock or distress, Lulu simply stamps her foot in exasperation as her would-be client leaves the room without sex, and without paying her. Her selfish detachment makes Alwa's inability to look beyond his love or lust both tragic and infuriating.

The first movement of the *Lulu-Suite*, however, allows Lulu and Alwa's relationship to exist in a completely different context, giving it a life of its own away from its sordid operatic surroundings. There are several factors that articulate the differences between the Rondo's operatic setting and its role in the *Suite*. The first is the opening of the *Suite* itself, where the Rondo is preceded by an 8-measure segment that Berg termed "Introduzione." Derived from measures 54–62 of the opera's Prologue, a motif commonly referred to as Lulu's Entrance Music (Figure 1), it opens the work with a warm and inviting atmosphere, with muted strings and a soaring flute solo.[1] This gesture is a significant departure from both the terse, dramatic tetrachord that starts the opera as well as the way the Rondo begins in its operatic context, which serves as an early indication that the composer's expressive intentions in the *Suite* are different.

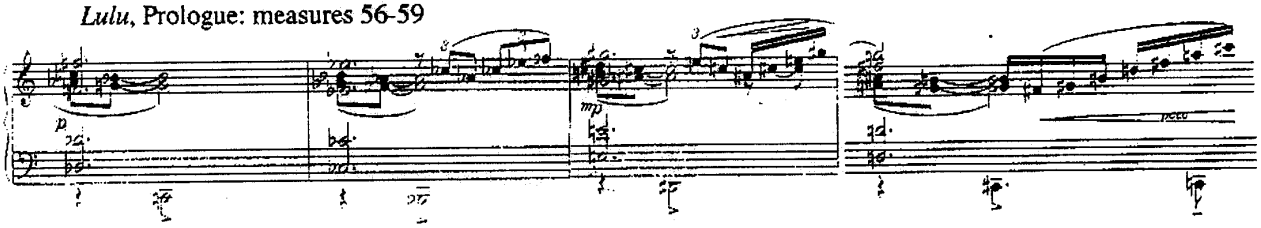
The Entrance Music has been adapted for the Introduzione in two significant ways. First, the meter has been changed from 3/4 with ♩=40 in the opera's Prologue to a broader 6/4 meter for three measures before returning to 3/4 for the remaining five bars. The eight introductory measures are marked "Andante", which is later assigned a metronome marking of ♩=69. The broader meter and slightly more expansive tempo suggest the establishment of a more intimate atmosphere. Another change in the Introduzione is that it lies transposed a whole step above its original setting in the opera. This enables the Introduzione to segue into the Rondo in measure 8 with a descending chromatic half-step that anticipates the bass motion of the first three measures of the Rondo itself, allowing a seamless transition.

The second factor that differentiates the Rondo's setting in the *Suite* from its operatic context is the omission of all text in the *Suite's* rendering of the Rondo. Berg had previously contemplated having two vocal soloists for the *Suite*, a tenor and a soprano, but changed his mind several times as he pondered the difficulty of attaining suitable singers for performances. Although Berg also considered writing "optional" vocal parts, he eventually settled on retaining a soloist only for the third movement, the *Lied der Lulu*, and scoring the remaining movements for orchestra alone.

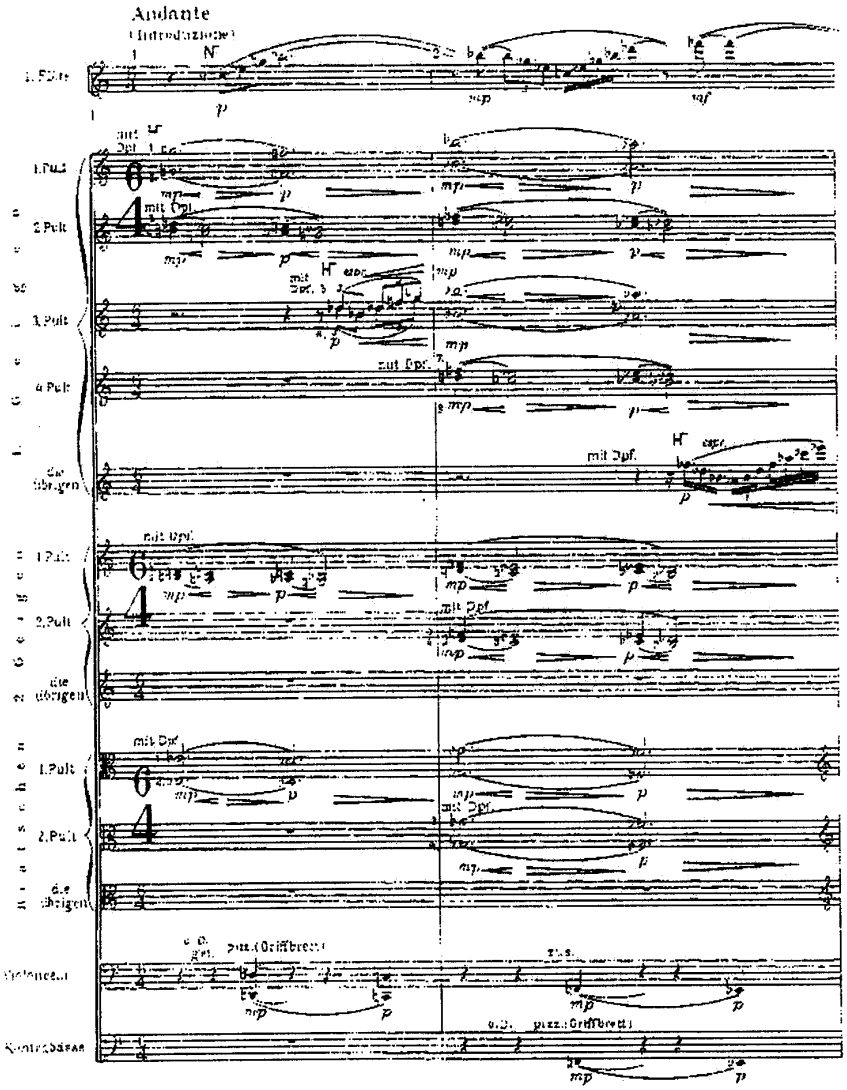
The absence of text creates a significant divergence in the portrayal of Lulu and Alwa's relationship since some of the most disturbing moments in the opera originate in the dialogue. For example, the exposition and recapitulation of the Rondo end with Alwa's submission to Lulu's charms. Both times, as he lies recovering from the emotion of the moment, she reminds him in the cold tone of *Sprechstimme* that she is a murderess: first, that she poisoned his mother, and later, as mentioned above, that his father bled to death on the sofa they were lying on. Another set of examples can be found in the excerpt that serves as the basis for the Introduzione. In the opera, the accompanying text is the Animal Trainer's scathing diatribe as he introduces Lulu to the audience as the serpent in his menagerie, chastising her for "meowing and preening" in order to misrepresent the "innate nature of Woman". Much later, when this music is heard again after

Figure 1.

Lulu, Prologue: measures 56-59



Lulu-Suite, Movement 1 (Rondo): measures 1-2

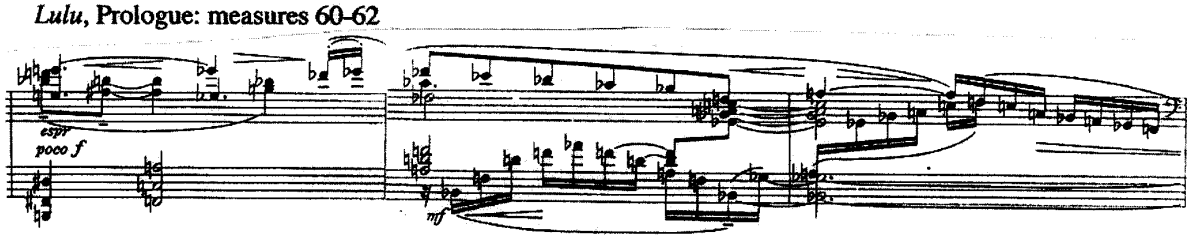


(continued)

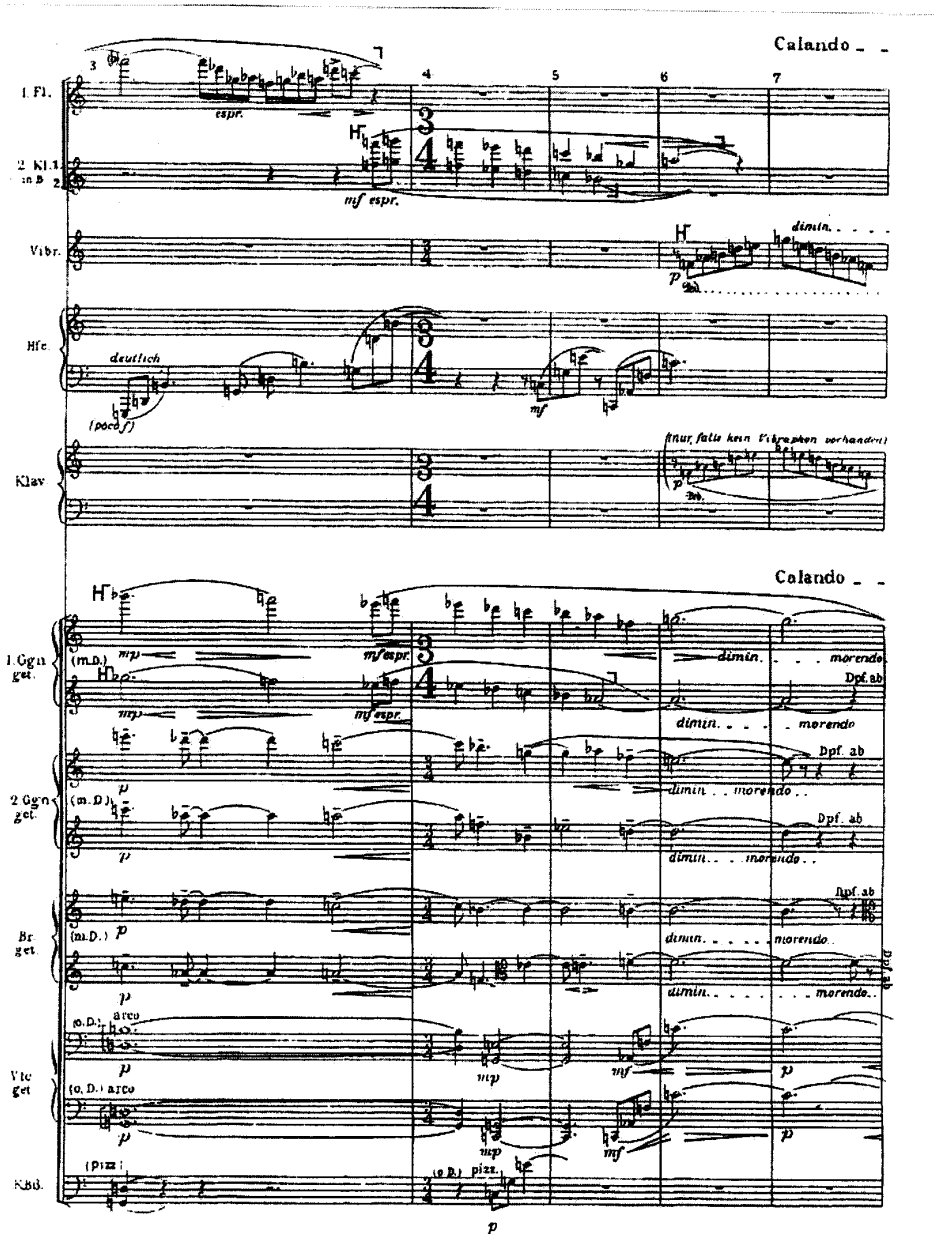
Lulu's return from prison, Alwa gazes into her face and proclaims that "were it not for your two childlike eyes, I would say that you were the most conniving whore who ever coaxed a man to his doom," to which Lulu replies, "By God, I wish I were!" The omission of these lines, which complicate and tarnish the audience's perception of Lulu's character as well as her relationship with Alwa, allows the music of the Introduzione to be convincingly integrated with the Rondo and for the movement to exist without being encumbered by the textual contradictions that permeate the opera.

(Figure 1, continued)

***Lulu*, Prologue: measures 60-62**



***Lulu-Suite*, Movement 1 (Rondo): measures 3-7**



The third point that differentiates the Rondo's operatic context from its setting in the *Lulu-Suite* is the presentation of the Rondo itself. In the opera, the musical and dramatic interruptions of the Rondo contribute to what Patricia Hall has called an "unrequited character."[2] Contributing to the Rondo's disjuncture, its development and recapitulation take place only after a considerable length of the opera: nearly 700 measures of music and a narrative gap of two years. In contrast, the first movement of the Suite unites the disparate strands of the Rondo material, thereby detaching

the Suite from the opera's narrative line. (A table of the Rondo's corresponding measure numbers between the opera and the Suite can be found in Figure 2 of your handout.) The unified exposition excludes all the music that signified the presence of Lulu's other lovers, resulting in a more intimate setting that is focused and believably personal. The uninterrupted music also achieves a more compelling musical pace that is allowed to build and surge in ways that suggest the contours of courtship.

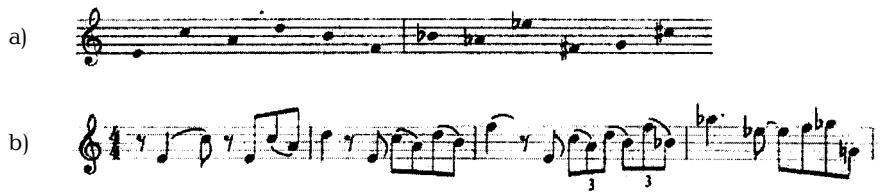
Figure 2. Comparison table of measure numbers

Lulu-Suite: Rondo	*Lulu* (interruptions in parentheses)
1-8	Prologue:
	56-62
9-15	Act II:
	243-249
	250-261
	(First interruption of Manservant)
16-27	262-273
	274
	(Doctor Schön, aside)
28-39	275-286
	287-293
	(Second interruption of Manservant)
	294
	(Doctor Schön, aside)
	295-297
	(Manservant and Doctor Schön withdraw)
40-51	298-309
	310-317
	(The Athlete looks out from behind a curtain; Lulu glares at him. Doctor Schön, aside)
52-70	318-336
	(Doctor Schön makes his presence known; end Rondo Exposition.)
71-220	1101-1150

Just as the interruptions are removed from the exposition, the substantial length of music that stands between the Rondo's exposition and its development and recapitulation in the opera is removed for its setting in the *Suite*. The excluded material, which contains Doctor Schön's murder as well as the "Film Music" detailing Lulu's arrest, subsequent incarceration, and escape from prison, signify the turn of Lulu's fortunes. By the time Lulu is reunited with Alwa in the opera, she is a convicted murderess as well as a fugitive from the law. By removing this from the narrative, Berg again focuses on the development of the couple's relationship. The Rondo recapitulation escalates the emotions introduced in the exposition with an increased urgency of phrasing and a higher level of orchestral dynamic, reaching *fortissimo* at its climax whereas the exposition attained only *forte*. If the exposition suggests the shape of courtship, then the music of the recapitulation is undeniably sexual in nature, representing a single encounter that progresses from a suggestive overture to consummation.

These three points of departure between the Rondo's operatic context and its presentation in the *Lulu-Suite* – the calm opening Introduzione, the deletion of text, and the unification of the Rondo fragments – intensify the musical meaning of the Rondo itself. Several different interpretations of the Rondo have been proposed by noted Berg scholars, including "different facets of Alwa's personality and his love for Lulu," an "[accompaniment for the] dialogue between Alwa and Lulu", and "Alwa's declaration of love."[3] Since the Rondo theme itself is derived from Alwa's row as P4 (Figure 3), the material's symbolic association with him is evident. However, Berg's treatment of the Rondo in the context of the *Lulu-Suite* suggests that it does not represent Alwa himself nor the relationship he has with Lulu, but rather the idealization of that relationship. As such, the Rondo in the opera can be interpreted as Alwa's internalized ideal of a romantic or sexual relationship mired in the brutality and insensitivity of the physical world, whereas the *Suite's* presentation of the same material allows Alwa's love to exist just as he sees it.

Figure 3. Alwa's series (P4) (a) and Rondo theme (b)



The concept of assembling a suite of concert-pieces in order to put forth a divergent view of a pre-existing work was not new to Berg; in fact, he had done so ten years before when he arranged his *Three Fragments from Wozzeck*.[4] The creation of the *Lulu-Suite* may well have served as "propaganda", but ultimately Berg's justification for the concert work lies deeper than the need for publicity. The composer was among the fortunate few who witnessed a private, invitation-only staging of *Die Büchse der Pandora* at the Trianontheater on May 29, 1905. The performance was prefaced by a lengthy talk by the social and literary critic Karl Kraus, who was also the evening's producer. One of the major points addressed by Kraus in his lecture, which made a deep impression on Berg, was that the Wedekind play contained "characters" by necessity; the work, however, was not centered upon those individuals that inhabited the play but rather upon an idea or thought.[5] Kraus viewed *Die Büchse der Pandora* as a criticism of contemporary morality in that the play was not a narrative about Lulu, but an expository study of what she personifies: the apex of female sexuality, what every man wants to attain.[6] The characters in the drama, then, are nothing more than idealizations of the archetypes that they represent. It seems that Berg not only adopted Kraus's understanding of the play, but that in the *Suite* he found a forum in which this interpretation could be explicitly expressed.

An operatic setting, it seems, would only intensify the problematic interpretation that Kraus described in his lecture. A live theater performance requires actors to play characters, and if doing so makes an audience identify with the characters as individuals, then an opera – especially one in which each character is assigned his or her own tone row or other identifying musical gesture – would heighten the audience's perception of the onstage characters as individuals, and not, as Kraus divined, as representatives of recognizable archetypes. Perhaps because of this, Kraus himself had little sympathy for the operatic genre, regarding it as a forum for the pretensions of musicians, critics, and audiences alike.[7]

Berg's expression of the Krausian ideal in drama in both the opera and the *Suite* differ pointedly from one another.[8] In Lulu, the composer employs a large-scale reincarnation of Lulu's deceased husbands (Doctor Goll, the Painter, and Doctor Schön) as her three clients (the Professor, the Negro, and Jack the Ripper, respectively) on her first and last night as a prostitute. By doing so, Berg creates an arching symmetry spanning the course of the opera that effectively surrounds Lulu with what Kraus identified as "the world of Men".[9] In the *Suite*, Berg introduces archetypal representation from the beginning on a scale more appropriate to the smaller work. As

mentioned above, the accompanying text that identified Lulu's Entrance Music as with the character of Lulu has been deleted from the *Introduzione*, which allows for the argument that the "entrance" portrayed here is not that of the Lulu character but rather that of a Woman, entering the Rondo's representation of a Man's idealized world. Berg's usage of the Entrance Music in the *Introduzione* is appropriate not only for dramatic purposes, but also because the Rondo itself is already embedded with identifiable motifs derived from the Entrance Music in measures 71–74, 80–86, 100–107, and 150–156. However, both strands of the musical material remain distinct, which allows an interpretation of a metaphorical co-existence.

When comparing the Rondo's presentation in the opera to that of the *Suite*, the most notable differences have come down to a matter of dramatic intention and portrayal along the established ideal of Karl Kraus. However, the romanticized ideal portrayed in the *Suite* has a significant common thread with the broken, debased reality of the relationship portrayed in the opera: following the apex of the relationship's passionate consummation, the music falls tumultuously into the bass and the movement or scene ends with a furious iteration of the "fate" chords. In the opera, the chords make explicit what the audience already senses: namely, that Alwa's sexual and emotional obsession with Lulu will end in tragedy. Conversely, Berg's retention of the "fate" chords at the close of both the first and last movements of the *Suite* is harder to explain, and an adequate treatment of this and other issues lies outside the scope of this paper. It is apparent, however, that the movement's trajectory points firmly downward, from the initial ideal depicted in the Rondo to the fulfillment of what is suggested in its closing measures.

The direction that Berg explores over the next four movements of the *Lulu-Suite* continues to incorporate Karl Kraus's concept of idealization and the use of characters as examples of archetypal representation. The Rondo's suggestive duality enabled Berg to explore the coexisting levels of the Lulu narrative in an operatic forum as well as in a separate concert-work: an idealized relationship between a man and a woman and its shackling to an ultimately disillusioning, sordid reality. The greatest strengths of the Rondo, however, are its creative potential that allows for a very effective presentation in both operatic and instrumental settings, and its immediacy as a representation of personal drama, idealized or otherwise.

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Notes

[1] The Entrance Music is also called the "Freiheit motif" by David Headlam, after observing its association with Lulu's dramatic pronouncement upon her escape from prison in Act Two. (Headlam, p. 108)

[2] Hall, p. 145.

[3] Hall, p. 144, Headlam pg. 99, and Jarman, p. 208, respectively.

[4] From an unpublished paper presented by the present author at the AMS 2004 entitled "Alban Berg's Three Fragments from Wozzeck: A Character Reconsidered."

[5] This was later published in its entirety in Kraus's weekly journal *Die Fackel*, Issue no. 182.

[6] Grimstad, p. 78.

[7] Schroeder, p. 102–3.

[8] A more detailed discussion of the formal dichotomy between Berg's intention to express the Krausian ideal in drama and the composer's overt association of himself with Alwa's character will be discussed in my forthcoming dissertation on Berg's *Three Fragments from Wozzeck* and the *Lulu-Suite.*

[9] This is a large topic with several interpretations. Two discussions which relate well to the present topic can be found on p. 53–98 in Silvio Dos Santos's dissertation *Portraying Lulu: Desire and Identity in Alban Berg's "Lulu"* and p. 306–327 in Suzanne Rode's *Alban Berg und Karl Kraus*.

Santrauka

Bergo kūrybinis procesas tarp „Lulu“ ir „Lulu siuitos“: naujas požiūris į rondo

Mįslinga laisvo elgesio Lulu, pagrindinė A. Bergo to paties pavadinimo operos veikėja, išgyveno tris santuokas ir begalę meilės nuotykių, iš kurių ir muzikine, ir dramaturgine prasme toliausiai pažengė jos flirtas su Alva, Lulu geradario ir trečiojo sutuoktinio daktaro Šiono sūnumi. Nors nuo pat pirmos iki paskutinės operos scenos šis jų ryšys yra romantiškas ir atvirai seksualus, scenoje jis kažkodėl vaizduojamas fragmentiškai. Poros santykius muzikoje atskleidžia rondo, į kurį operos eigoje nuolat įsiterpia veiksmo ir muzikiniai epizodai. Dėl šių intarpų veikėjų santykių raida tampa miglota. Nors jų ryšys akivaizdžiai progresuoja, jį vaizduojant lyg ir trūksta nuoseklumo bei vientisumo.

1935 m. pavasarį Bergas sudarė penkių dalių „Lulu siuitą“. Ir tiktai čia, kai rondo tampa pirmąja kūrinio dalimi, jis nuskamba nuo pradžios iki galo, nepertraukiamas ir netrikdomas operos intarpų. Operoje Lulu santykiai su Alva tėra tik vienas iš jos meilės nuotykių, o siuitoje jų meilės istoriją perteikia sukoncentruota rondo medžiaga, kuri įtikinamai plėtojama.

Pranešime analizuojama, kokią prasmę rondo įgauna „Lulu siuitoje“ ir vaizduojant Lulu bei Alvos santykius. Išvadose daroma prielaida, kad Bergas galėjo turėti daug svaresnių priežasčių „Lulu siuitai“ sukurti, negu iki šiol galima buvo manyti.

Rimantas Janeliauskas

Types Creative Activities of Composer

In order to get a deeper insight into this not enough studied and today still being a "mysterious" aspect of the composer's activities, one should take a broader glance and make an attempt to more precisely define the very essence and origin of the phenomena of creation.

Here some achievements in the sphere of analytical psychology, defining a certain round of final archetypal schemes, can prove useful. The starting point of such studies – the myth "Creation of the World", which in the opinion of E. M. Meletinskij – "a major, basic myth, the myth par excellence" (Meletinskij, 1993: 17). He holds that four oldest archetypal subjects, or motifs of "creation" dominate in the mythology of various nations (ibid. 47). A slightly simplified model of these motifs can be characterized as follows:

1) a "delivery" motif – gods create objects biologically, magically, or after death are incarnated in objects themselves (incarnation);
2) an "acquisition" motif – discovery or seizure of objects in the strange space of cultural heroes;
3) a "making" motif – the objects made by demiurges employing material and instruments; and
4) a "spontaneous" emergence of objects ("descent from the sky"), usually by order of God or fate.

On the basis of these archetypal motifs we shall make an attempt to categorize creative processes of composers.

The process of "creative delivery" seems to be characteristic of the composers for whose incentive of activities serve certain experiencies, feelings, and emotions. The composers of this type often mention in a metaphorical idiom a "baby" carried in their soul ("an opening grain"), the "sufferings of the delivery" of the work, etc. Part of the investigators associate such a close to nature and biology stimulus for creation with the instinct of man's population and creative "Eros' energy" (Z. Freud). A great number of romanticists represent this motif of creation – P. Tchaikovsky, G. Mahler, later – A. Honegger, and particularly A. Webern. Unlike earlier composers, the latter would mature for a very long time not the themes of their works but the cells of the series. The stimulus for "delivery" and "carrying" is close to J. Gruodis' creative psychology. As A. Ambrazas puts it, "J. Gruodis would mature musical thoughts for a long time and would not always find the desired expression for them. A creative process for him was the work requiring the tension of the whole power of the soul [...]. He could not write music quietly, methodically, at the same time every day and at intervals between other urgent things" (Ambrazas, 1981: 150). His "delivery sufferings" can be partially explained by the peculiarity of a creative process that here a feeling (subject) proceeds the means of sounding, controls and limits them. Thus, in the work of an incautious novelty (incidentally, alike stereotypes), it could possibly violate a natural "Eros" system and the origin of feeling.

The creative process iniciated by the "acquisition" type seems to be mostly characterized by a mimetic, or adaptable principle. Composers most often derive creative ideas and inspiration from various "not-I" objects. Earlier, this activity would show itself simply through the adaptation of musical tradition (Merriam, 1995: 48). This principle marks J. S. Bach's creative process: "He studied music by other composers by way of copying it or arranging scores; it became a habit with him for the rest of his life" (Hanning: 305). J. S. Bach, therefore, adopted musical ideas of dozens of his predecessors and contemporaries – H. Schütz, J. Pachelbel, D. Buxtehude, G. F. Händel, G. Telemann, A. Vivaldi and others. The objects acquired in modern times undergo specialization, get purified. For example, B. Bartók consequently follows Hungarian peasants' melody, O. Messiaen creatively "imitates" Christian medevial and Oriental tradition of music, H. Cowell composes everything after a natural acoustic sound-row, Y. Xenakis imitates mathematical formulas. Of interest is the fact that the majority of these composers often generalize their creative precondi-

tions ("objects") by way of theoretical treatises of composing (Messiaen, Cowell, Xenakis). The mimetics of "adapted objects" is also characteristic of Lithuanian composers. J. Juzeliūnas derived ideas for his work from Lithuanian ethnocells (his treatise "On the Structure of the Accord", an unquestionable support for O. Balakauskas – a projection of fifths (the treatise on harmonic system "Dodecatonic"). The type of mimetic activity partially defines the possibilities of the music proper which flow and expand from the chosen (acquired for a "present") objects.

The "making" archetype principally motivates the composer's activities as the projection of the craft secrets. Here one mainly relies on a constructive idea for the mastering of logical material. Whereas the emplayment of new material is usually associated with the evolution of creation. "Homo faber" psychology stimulates to endlessly polish a work and to compose several versions of it (Beethoven's "Leonora No 3" or the sketches for the theme of "Heroic" symphony E-flat major, movement II). A montage of the pieces of material is not alien to this activity. For example, the famous J. Rossini adapted the overture to his earlier opera "Elizabeth, Queen of England" for "Barber of Seville". There was also a similar case with I. Stravinsky's opera "The Nightingale", the music of which served for the construction of the symphonic poem "Song of the Nightingale", S. Prokofiev used the music from the opera "The Fiery Angel" for his Symphony No 3, etc. It is worthy of mention that the composers, who "write music masterfully", in frequent cases explain their activity "almost exceptionally through a working idiom: searching for material, its opposition, selection, organization, etc." (Старчеус, 1998: 106). In this respect P. Hindemith's theoretical treatise is particularly typical and can be logically called as "The Composer's Craft" (Hindemith, 1939). A systematic and routine work is peculiar to the great majority of "Homo faber" composers on the whole. From among Lithuanian composers E. Balsys is most close to this type. As O. Narbutienė points out "Balsys (like Beethoven – *R. J.*) worked alike – after discovering a musical theme he would perfect and "polish" it for a long time, searching for an optimal variant. After the completion of the work even after its successful performance, he would edit it anew, re-instrumentalize, if notices any falts [...] (Narbutienė, 1999: 173).

The archetypal "spontaneous" type of activity is profoundly associated with man's early images about creation as a sacred act whose culmination – radiance, recovery of sight and opening (psychologists would also say "insight", inspiration). A mythic hero of this activity – the consecrated, medium, the prophet on whose spiritual moral features the work depends. Here a creative act is understood as a "particular state of the Author (composer – *R. J.*) overwhelmed by the feeling as if somebody were dictating to you" (Старчеус, 1998: 110). The composer under the spell of inspiration does not search but proclaim". A striking feature of this activity – unerring intuition (mathematicians would call it – "instantaneous extraction of the roots of numerals").

G. F. Händel, W. A. Mozart and F. Schubert greatly distinguished themselves by their spontaneous creative activities. It is but natural that a cosmogonic theme is characteristic of a considerable part of the "spontaneous opening" type of composers (Ives, Skriabin, Stockhausen). The process of their musical creation, as E. A. Magnickaja notes, is perceived as a composer's creative synergy with the cosmos (Magnickaja, 1996: 30). The composer's road lit by inspiration is full of secret mysteries, unsolved genial discoveries and spontaneously formed cycles (presumably – Mozart's "Fantasia in d-moll", Schubert's "The Swan's Song", Chopin's "Etudes", Schoenberg's "5 pieces for orchestra", etc.). A creative act as a "flash of lighting from the sky" is peculiar to Čiurlionis.

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Santrauka

Kompozitoriaus veiklos tipai

Norėdami iššvalgyti šią menkai tyrinėtą ir šiandien, sakytume, dar „mįslingą“ kompozitoriaus veiklos aspektą, turime pabandyti tiksliau apibrėžti pačią kūrybos fenomeno duotį ir prigimtį.

Čia gali praversti kai kurie analitinės psichologijos pasiekimai, apibrėžiantys tam tikrą baigtinių archetipinių schemų ratą. Panašių tyrimų išeities taškas – „Pasaulio sukūrimo“ mitas, kuris, pasak E. M. Meletinskio, „pagrindinis, bazinis mitas, mitas *par excellence*“. Jo nuomone, įvairių tautų mitologijoje vyrauja keturi seniausi archetipiniai „kūrimo“ siužetai, arba motyvai, kuriuos, šiek tiek supaprastinus, galima apibūdinti šitaip:

1) „gimdymo“ motyvas – dievai kuria objektus biologiškai, magiškai arba patys po mirties įsikūnija daiktuose (inkarnuojasi);
2) „įgijimo“ motyvas – objektai kultūrinių herojų atrandami svetimoje erdvėje arba jie pagrobiami;
3) „darymo“ motyvas – objektai demiurgų pagaminami, naudojant medžiagą ir instrumentus;
4) „spontaniškas“ objektų pasirodymas („nusileidimas iš dangaus“), paprastai Dievo arba likimo valia.

Pagal šiuos archetipinius motyvus pabandysime tipologizuoti kompozitorių kūrybos procesus.

Kūrybinis „gimdymo“ procesas, regis, būdingas tiems kompozitoriams, kurių veiklos akstinas yra tam tikri išgyvenimai, jausmai ir emocijos. Labai dažnai šio tipo kompozitoriai metaforiška kalba užsimena apie sieloje „nešiojamą kūdikį“ („besiskleidžiantį grūdą“), kūrinio „gimdymo kančias“ ir pan. Tokį artimą gamtai ir biologijai kūrybos stimulą kai kurie tyrinėtojai siejo su žmogaus populiacijos instinktu ir kuriančia „Eroso energija“ (Z. Freudas). Šiam kūrybos tipui ryškiai atstovauja daugelis romantikų – P. Čaikovskis, G. Mahleris, vėliau – A. Honeggeris ir ypač A. Webernas. Kitaip nei ankstesni kompozitoriai, pastarasis kankinamai ilgai brandindavo ne kūrinių temas, bet serijų ląsteles. „Gimdymo“, „nešiojimo“ akstinas artimas J. Gruodžio kūrybinei psichologijai. Pasak A. Ambrazo, muzikines mintis J. Gruodis brandindavo ilgai ir ne iš karto surasdavo norimą jų išraišką. Kūrybos procesas jam buvo darbas, reikalaujantis visų dvasios jėgų įtampos. Jis negalėjo rašyti muzikos ramiai, metodiškai, kiekvieną dieną specialiai skirtomis valandomis, taip pat ir protarpiais, tarp kitų neatidėliotinų darbų. „Gimdymo kančias“ paaiškina ta kūrybinio proceso ypatybė, kad čia jausmas (turinys) eina pirma skambesio priemonių, jas kontroliuoja ir riboja. Tad neapdairus novacijų panaudojimas kūrinyje (kaip ir trafaretų) pažeistų natūralią „Eroso sistemą“ ir jausmo prigimtį.

„Įgijimo“ archetipo inicijuojamam kūrybos procesui galbūt labiausiai būdinga mimetinė, arba supanašėjimo, nuostata. Kompozitoriams būdingas kūrybinių idėjų ir įkvėpimo sėmimasis iš įvairių „ne Aš“ objektų. Ankstyviausia forma ši veikla pasireikšdavo paprasčiausiu muzikinės tradicijos perėmimu (Merriamm). Ši nuostata ryški J. S. Bacho kūryboje. „Jis studijavo kitų kompozitorių muziką, ją kopijuodamas ar aranžuodamas partitūras; šis įprotis išliko visą gyvenimą“ (Hanning). Bachas perėmė daugybės savo pirmtakų ir amžininkų muzikines idėjas – H. Schützo, J. Pachelbelio, D. Buxtehude's, G. F. Händelio, G. Telemanno, A. Vivaldi ir kt. Moderniais laikais „įgyti“ objektai specializuojami, išgryninami. Antai B. Bartókas nuosekliai laikėsi vengrų valstiečių melodijų, O. Messiaenas kūrybiškai „mėgdžiojo“ krikščioniškų viduramžių ir Rytų muzikos tradiciją, H. Cowellas komponavo pagal natūralųjį akustinį garsaeilį, Y. Xenakis imitavo matematines formules. Įdomu tai, kad daugelis šių kompozitorių savo kūrybines prielaidas („objektus“) apibendrino teoriniais komponavimo traktatais (Messiaenas, Cowellas, Xenakis). „Įgytų objektų“ mimezė būdinga taip pat lietuvių kompozitoriams (J. Juzeliūnui, O. Balakauskui).

„Darymo“ archetipas iš esmės motyvuoja kompozitoriaus veiklą kaip amato paslapčių projekciją. Čia labiausiai pasikliaujama konstruktyvia logine medžiagos įvaldymo idėja. O naujos medžiagos naudojimas paprastai rodo kūrybos evoliuciją. *Homo faber* psichologija skatina iki begalybės šlifuoti kūrinį, sukurti ne vieną jo variantą (Beethoveno „Leonora 3“, „Herojinės“ simfonijos *Es-dur* II dalies temos eskizai). Šiai veiklai nesvetimas medžiagos „gabalų“ montažas. Taip garsusis G. Rossini pritaikė „Sevilijos kirpėjui“ uvertiūrą, sukurtą savo ankstesnei operai „Elžbieta, Anglijos karalienė“. Panašiai atsitiko su I. Stravinskio opera „Lakštingala“, iš kurios muzikos kompozitorius „sustatė“ simfoninę poemą „Lakštingalos giesmė“, o S. Prokofjevas savo operos „Ugnies angelas“ muziką

panaudojo III simfonijoje ir kt. Įdomu tai, kad „meistriškai kuriantys muziką“ kompozitoriai neretai savo veiklą aiškina beveik išimtinai darbine leksika: medžiagos ieškojimas, jos pasipriešinimas, atranka, organizacija ir t. t. Šiuo atžvilgiu ypač būdingas P. Hindemitho traktatas (1939). Apskritai daugumai *Homo faber* kompozitorių būdingas sistemingas, pastovus, rutininis darbas. Iš lietuvių kompozitorių šiam tipui ypač artimas E. Balsys. Kaip pažymėjo O. Narbutienė, panašiai kaip Beethovenas dirbo ir Balsys: suradęs muzikinę temą, ilgai ją tobulindavo, „šlifuodavo“, ieškodavo optimalaus varianto. Ir užbaigęs kūrinį, net po sėkmingo atlikimo pastebėjęs trūkumus, iš naujo redaguodavo, perinstrumentuodavo.

Archetipinis „spontaniškos“ veiklos tipas susijęs su ankstyvaisiais žmogaus vaizdiniais apie kūrybą kaip sakralinį aktą, kurio kulminacija – nušvitimas, praregėjimas, atvėrimas (psichologai dar pasakytų – įkvėpimas). Mitinis šios veiklos herojus – pašvęstasis, mediumas, pranašas, nuo kurio dvasinių, moralinių savybių priklauso kūrinys. Kūrybinis aktas čia suprantamas „kaip ypatinga autoriaus būsena, pasireiškianti pojūčiu tarsi „tau diktuotų“ (Starčeus). Kompozitorius, pagautas įkvėpimo būsenos, nebe „ieško, o skelbia“. Stulbinamas šios veiklos bruožas — neklystanti intuicija (matematikai pavadintų – „akimirksniu traukiamos skaičių šaknys“). Spontaniška kūrybine veikla ypač ryškiai išsiskyrė G. F. Händelis, W. A. Mozartas, F. Schubertas. Dėsninga, kad nemažai daliai „spontaniško atsivėrimo“ kompozitorių (Ivesui, Skriabinui, Stockhausenui) yra būdinga kosmogoninė tema. „Jų muzikinės kūrybos procesas suvokiamas kaip kūrybinė kompozitoriaus sinergija su kosmosu" (Magnickaja). Toks kompozitoriaus kelias pilnas paslapčių, neįmintų genialių atradimų, taip pat savaimingai susidėstančių ciklų (manytume, kad tokie ciklai yra Mozarto „Fantazija“ *d-moll*, Schuberto „Gulbės giesmė“, Chopino „Etiudai“, Schönbergo „5 pjesės orkestrui“ ir kt.). Kūrybinis aktas, „kaip žaibo tvykstelėjimas iš dangaus“, taip pat būdingas M. K. Čiurlioniui.

Paul Ramshaw

Lost in Music: Understanding the Hermeneutic Overlap in Musical Composition, Performance and Improvisation

This paper will present a method of understanding the interpretive mechanism of creativity that occurs during composition, performance and improvisation.

In his seminal work 'Truth and Method', Hans Georg Gadamer wrote of being 'lost in play': the way towards understanding and interpretation was to recognise that we are only 'truly' capable of interpreting something if we are totally absorbed in it. A consideration of Gadamer's concept of play will provide the starting point for generating insights on how we think about doing something creative when we are actually doing it.

The paper will also revisit the problem of the hermeneutic circle, seek to unpack the relevance of Gadamer's analogy for contemporary approaches to composition, performance and improvisation which it will also be suggested constitutes composition and performance in real time.

Introduction- the nexus between composition and performance that exists in improvisation

The processes of composition and performance have mostly been considered to be separate pursuits by academe. Reasons for this include the nature of the debate over the differences between studying form and studying context. On one side, positivist musicological study and music theory that can be broadly considered as structuralist looks at parts and details. On the other, the sociological approaches of hermeneutics include discursive or socio-historical circumstances of the musical work. The result of this conceptual division creates obvious differences: composition may be structurally analysed in a scientific manner that overlooks social mechanisms and the aesthetic musical experience, and performance may be analysed as a social process involving people, that for others lacks 'scientific rigor'. There is debate over whether or not these positions can be reconciled.[1] However, there may be embedded historical, social and cultural factors in play that prevent such a prospect.

> *...there is a precedent for a sort of philosophical snobbery about musical expressions that are unorthodox and that are set apart from conventionally expected lines of development... Alperson (1984) wished to move improvisation from its status as a musical anomaly to its legitimate place as an authentic and meaningful musical form. (Valone, 1985: 193)*

Whether a division between theory and practice is useful, and for whom and for what purpose has been rehearsed many times in critical sociology though perhaps not often enough in musicology.[2] In the social sciences it is argued that orthodox theories, including methods of knowledge and control generally maintain the *status quo* in circumscribing what practices are 'right' and others 'wrong'.

This means that the academic traditions of the musical conservatory are already pre-configured or conditioned by historical developments, methods and processes from which we cannot escape or distance ourselves. A broad example of this is the way music is analysed by music theorists using various rules of composition and methods of analysis, and by musicologists as a creative and social process within a social context using sociological and, or anthropological methods.[3]

What is hermeneutics?

Although there are a number of approaches to understand the processes of composition and performance that can be reduced to either forms of structuralist or hermeneutic research,[4] the perspective taken here is underpinned by a form of hermeneutics that aims to be both inclusive and reflexive. The hermeneutic approach involves the processes of appropriation, interpretation and understanding of meaning. Originally used to interpret and explain biblical texts, its use expanded to literary history and poetry and has now broken free of being solely a text centric interpretative device. Its use has also extended to so-called 'text analogues' that constitute forms of action including performance and other creative acts.

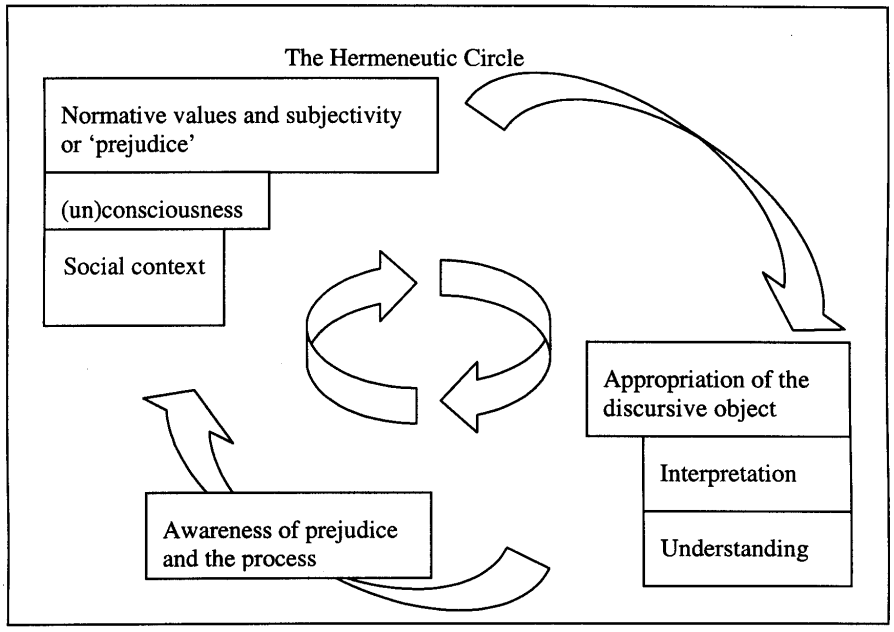
This is useful when considering the question of the differing approaches between theorists and musicologists as it can be used in a critical manner to look at the *purpose* of the approach as well as the *historical contingencies* in which it may operate. The purpose may include not only looking at rules of method but also the nature of the theoretical school or orthodoxy that operates as a guiding, conforming or overall controlling and validating influence or arbiter. The historical and contextual approach allows a consideration of the era in which the music is composed, performed, and improvised that extends to social and cultural artefacts about how, when, where, and why these things place and who was involved, and it aims to interpret and understand what the experience may have been like for those involved, both as musicians and members of an audience.

A critical hermeneutic approach is thus useful for understanding the musical processes because it allows a dialogic consideration[5] of the objects of research mentioned above, though in some ways these may be contingent upon mainstream orthodox (structuralist) or heterodox (alternative or peripheral) conceptions of how forms of creativity operate. However, it also allows for the object to be discovered within an ontological landscape of historical and social contingency that permits a wider understanding by acknowledging the bias that methodological contingencies create within the process of appropriation, interpretation and understanding. This approach has a similarity with 'grounded theory' in sociology in that it is not a theory *per se* but allows a consideration to be built up by reflexive analysis. As such, this subsumes the role of method to dialogic and contextually situated examination.[6] This represents a challenge to the nature and validity of epistemology in general, which brings to the fore questions about how we as subjects, think about the objects of research and how we may or may not make claims about the validity of knowledge generated by forms or mechanisms of understanding.

The hermeneutic circle and the fallacy of objectivity

The hermeneutic approach to interpretation and understanding is not without problems. The 'hermeneutic circle' (see Figure 1) is the problem that interpretation is mediated by human consciousness, and as such it is not possible to be objective about things that are variable, such as normative values, opinions and aesthetics. An example of this is how does one interpret and understand the intentions of an author or composer if we can never experience their thoughts? As we all perceive differently it may not be enough to simply decide based on ones opinion. Even the originators themselves may not conceive and understand their work in the same way at the same time, as everyone experiences when one finds a letter or diary from years past and reads it with new or different understanding.

Figure 1. The Hermeneutic Circle



If our opinions have a large degree of influence on how we interpret and understand knowledge and media, appropriation interpretation and understanding of meaning are therefore susceptible to various forms of social and historical construction.[7] As can be seen from the Figure 1, it is possible to enter the ongoing hermeneutic process towards understanding at any point. However, interpretation and understanding are not static destinations but contextually specific: as context changes such as social environment, our conscious or unconscious perception and awareness and the system of rules or cultural mores to which we subscribe, our preferences and biases and appropriation of the discursive object (i.e. the ontological 'is' or entity of perception) are 'colourised'. We may only attempt to mitigate this colourisation by aiming to become continually and reflexively aware of these factors that operate within the hermeneutic circle with the aim of providing more accurate details and thus context etc that feed into the ongoing hermeneutic process. In other words one may never achieve total and 'pure uncoloured' understanding but by embracing the possibility of prejudice one can attempt to get closer than we otherwise would.

Notwithstanding the problem of the hermeneutic circle that arises when one seeks to understand subjective awareness, it can be argued that this acknowledgement of the subjective judgement of the researcher and subjectivity exercised by the subjects of research is a necessary condition to avoid laying claim to what can be called a 'general ahistorical theoretical framework' that can be applied in all situations. This is sociologically desirable because as all objective facts pass through human mediation and are tempered (or constructed) by social and historical specificity, there can be no monopoly of objectivity in pure form (though politicians may have us believe otherwise).

Gadamer's use of hermeneutics and the concept of play

Hans-Georg Gadamer's construction of hermeneutics involved an interesting approach towards achieving an 'uncoloured' understanding which involved an emphasis for the concept of 'play' in hermeneutics. For Gadamer, in "the experience of art" play could be described as something that did not refer to the conscious attitude of the creator or those who enjoy the work, but to the 'mode of being' of the art work itself. This mode of being can be explained as serving a 'medial' function that communicates the nature of play as a 'self-representing process' that does not require the activity of a player.

With reference to Huizinga (1939) Gadamer points out "the connection of children's and animal play with the 'sacred plays of the religious cult'... [that] in our idea of play the difference between faith and pretence is dissolved" (Gadamer 1981: 94). This leads Gadamer to assert the "primacy of play over the consciousness of the player:

> *It is part of the play that the movement is not only without goal or purpose but also without effort. It happens as it were, by itself. (Gadamer 1981: 94)*

The connection for Gadamer between play and art was an obvious one as they are 'imitations' of the natural world. This also reinforced the insight that play is inherently medial, as it imitates and expresses the "infinite play of the world" (Gadamer 1981: 94). Gadamer also argued that an object could not be apprehended by an aesthetic consciousness, which had the result of elevating the importance of play in the interpretation process (Gadamer 1981: 91). The act of play itself is not a serious activity, and this is something that the player is aware of. However, at the same time this knowledge is somehow shielded, separated or subconsciously treated in such a way that the player actually intends a relation to the seriousness of the playing itself.

> *The player himself knows that play is only play and exists in a world which is determined by the seriousness of purposes. But he does not know this in such a way that, as a player, he actually intends this relation to seriousness. Play fulfils its purpose only if the player loses himself in his play. (Gadamer 1981: 91)*

In other words, Gadamer is arguing that because we know that play is not serious, once one becomes immersed in the activity of play, and oblivious to external influences or the activities of others, its effect on us is that we are able to take the play itself seriously, almost a contradiction.

Indeed, it may be that it is only possible to lose oneself in play when we *know* that we can or are able to let ourselves become lost. This is why the analogy of children playing is important in understanding this concept. Children are able to play with a depth and sense 'abandonment' that is rarely possible in adulthood.

Of what relevance does Gadamer's analogy of 'play' have for contemporary approaches to composition, performance and improvisation? In many ways, Gadamers insights seem quite obvious for the processes at work during composition, performance and improvisation. The 'thing' itself, the object of play is self-representing and almost happens by itself through the 'ideal' vehicle of being lost or immersed in the creative process of human mediation. As such, this acquires an importance or primacy over the creator as a medial object. This last statement can be understood by considering the way one experiences focus, compulsion and near obsession in the relationship one has with ones art when one is 'immersed in the process of creating it.' In this way, losing oneself in play has profound significance for those who create, or practice the arts.

Gadamer was influenced by Martin Heidegger's position on intentionality and work on the development of phenomenology, i.e. what we experience as perception, thought, imagination and communication etc. (Malpas 2005). Experiences are interpreted by the way they are configured or relate to the social and historical context in which they occur. A critical understanding of these aspects allows one to make intentional decisions about context that allows a 'stepping back' or meta-perspective permitting more considered analysis, perception and reflection.

Losing oneself as a means of separation

Another way to think about being lost in the Gadamerian sense is to consider the post-structuralist thought of Deleuze. Aspects of Deleuze's philosophical concept of 'radically horizontal' or 'rhizomic' thought could be seen to be analogous to Gadamer's 'being lost' but with an awareness of being so. According to Lechte, radically horizontal thought:

> *...operates largely according to its own norms and concepts ... and for [Deleuze] a philosopher who thinks (i.e. one who creates an event in thought), separates him or herself from the history of philosophy. (Lechte 1994: 102)*

In this way we could for example be aware of the possibilities of influence from external knowledge or information but in the 'being lost' somehow subconsciously choose not to let these interfere with the thought processes of creative endeavour or play. Lechte's summary of Deleuze's contribution to post-structuralist thought provides another useful comment that alludes to the reflexive 'to and fro' and self-representing aspect of play that was also discussed by Gadamer in '*Truth and Method*' (1981).

> *...in Deleuze's work inspired by Nietzsche, the 'tree' (search for origins) of the subject-object' relation is compared to the 'rhizome' of horizontal thought, thought always in movement. (Lechte 1994: 95)*

The application of a hermeneutic approach

To apply the above approaches to creating music one may consider that creative reflection during composition can involve a consideration of time and space, proximity and degrees of specificity. In other words, one is able to allow ones stream of consciousness to flow in and out of focus in relation to both the particular and the non-specified idea or motif that is the current object of contemplation. With music this can be expressed in the way idiom or motif may develop over time, for example into instances of elision throughout a composition, a style of performance or improvisation that may have come about by reflexive focus on micro and macro aspects of melody and rhythm. The anecdotal experiences of contemporary performers and improvising musicians point to what can be described as a semi-awareness of being and non-being at the same time: the music plays *through* the player, or the player has the experience of being a conduit for the what Gadamer would call *the mode of being* of the art object. The use of *aides memoires*, metaphor, analogy, juxtaposition and other 'tools' of composition[8] involve a certain degree of intentional focus but with continual use and practice these too become part of the unconscious possibilities of being lost in the internal play of instrumentation of the creative process. Similarly in performance, and improvisation various instruments and degrees of technology acquire similar unconscious operational status. Where there are numerous musicians interacting together in an inter-subjective performance, for instance that which occurs in a jazz ensemble, the ebb and flow between conscious and unconscious patterns of expression permits composition in real-time as participants use call and response to both imitate and stimulate the improvised lines of the others.

During this process there may be a general intention to improvise, and some 'stock' lines and motifs may be thrown up in a semi-rehearsed manner, but there may also be instances of what can be called 'pure expression' that either modify and elaborate or simply innovate the melody, harmony or rhythmic form. During these episodes it can appear as if a convergence of being both relaxed and at the same time focussed results in the delivery of a purely expressed improvised line that allows for the essence of the immanent performance to manifest. It is at this point that one can see where Gadamer's analogy of being lost in play provides explanatory power to elucidate what happens during the creative process. Thus being lost may also involve a lack of seriousness or concern for the rules of engagement, of structure or attention to detail.

Indeed, approaches in *Zen* philosophy and indeed axioms of contemporary culture (e.g. Nike's 'Just Do It' logo) point to the need to refrain from the thinking about the goal of achieving a destination or technique and one will duly arrive at ones artistic or creative expression within the play of time: In other words, if we are trying 'too hard' we lose the ability to see the creative meaning in what we are doing and may simply be 'going through the motions' which does not equate with Gadamer's being lost and mode of being.

> *That does not mean that the art forms of Zen are left to mere chance, as if one were to dip a snake in ink and let it wriggle around on a sheet of paper. The point is rather that for Zen there is no duality, no conflict between the natural element of chance and the human element of control ... it is no contradiction to say that artistic technique is discipline in spontaneity and spontaneity in discipline. (Watts 1957: 174)*

However, it must be stressed that this is not at the expense of study and practice, simply that once one becomes accomplished, the technical aspects of ones art must first become internalised before they can be 'forgotten', later to be unconsciously articulated in composition, performance and improvisation.[9]

The overlap between composition, performance and improvisation

In an ongoing debate that began in 1984s, a key proponent, Phillip Alperson, asserted that the 'received' or orthodox view – in the Western cultural tradition of 'classical' music distinguishes between composition which consists of those activities that conceive and organise the parts or elements, and performance, which refers to the 'executory activity' that renders the composition into sequences of sounds.[10] Alperson's main point is that it is "functionally necessary" that the composition of orchestral music must involve an element of performance that is imagined, what he calls "inward performances." Even in the case of non-traditional compositional methods that involve algorithmic formulae or randomisations it can be argued that this inward performance is still possible because the composer is reflexively familiar with their compositional tools that they can expect them to produce for example, feelings of tension, gravity and dynamic pull etc. (Alperson 1991: 371)

Where, to use Alperson's terms composition and performance are 'related temporally and causally' one can imagine that the connection between these processes can be loose or more connected depending on the type of composition or performance etc. In what we can term the traditional method, in which a composer either has ideas of melody, harmony and or rhythm, that either pertain to a mood or feeling of expression or are simply generated intuitively, the processes of composition and performance may be separate and distinct (Figure 2, 'overlapping process 1'). However, with increased temporal and causal linkage, these two processes can be imagined to have varied degrees of overlap that create an area where composing involves a degree of performance and performance involves a degree of composition (Figure 2, 'overlapping process 2').

The area of imagined overlap visible between composition and performance provides an opportunity for further elaboration about what might take place (Figure 3). Again, using Alperson's terms we can see that the overlapping area labelled 'A' could involve an 'imagine inward performance' to take place in the mind of the composer or certain 'decisions about form' etc. to take place in the mind of the performer. These processes may occur within a conscious or unconscious sense of being, including when 'lost' in the Gadamerian sense.

Figure 2. The Overlapping Process 1+2

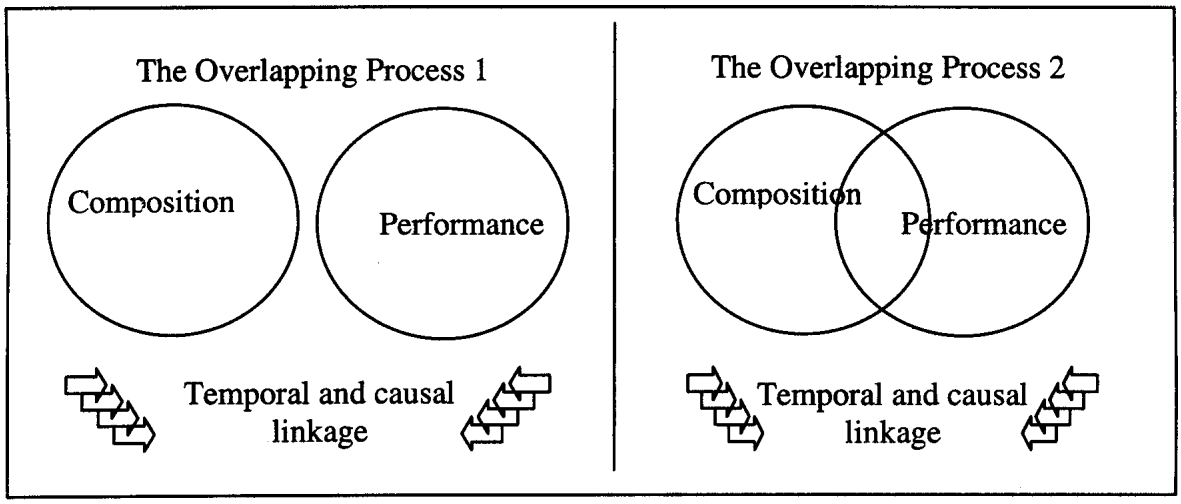
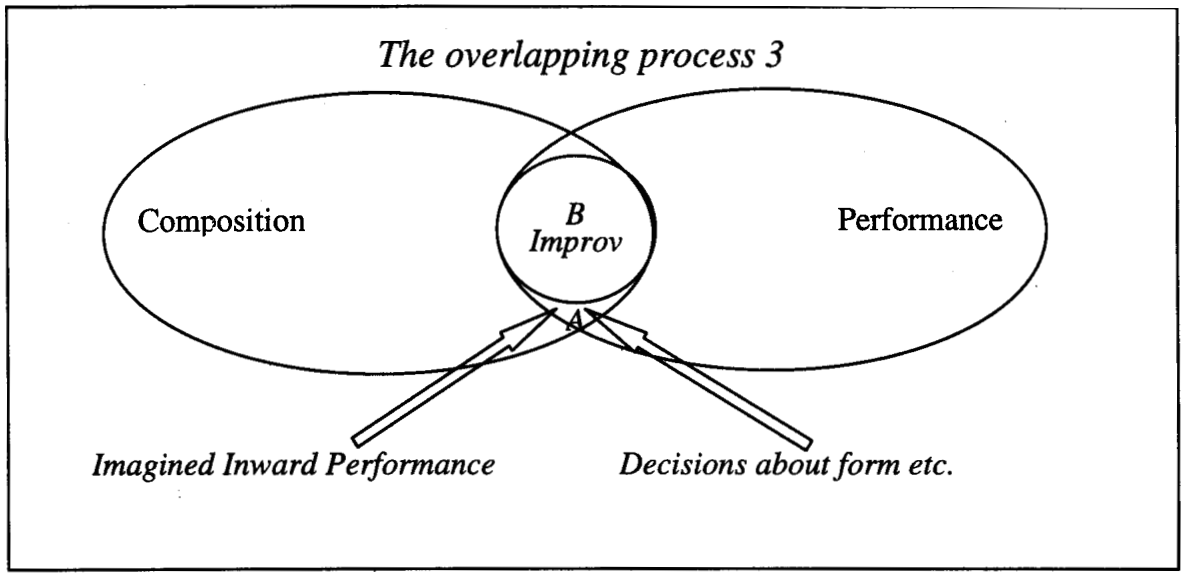


Figure 3. The Overlapping Process 3



The inner circle of overlap labelled 'B', allows us to discuss improvisation. The inner circle B can be understood in a number of ways, but this would always incorporate the described attributes from area A. Area B can be understood as a situation in which a composer works with her usual tools of composition, including the 'to and fro' mechanism of auditioning and developing various lines on an instrument and working through the transcription into notated music as she reaches the ideal motifs and expression etc. Here the composer is both improvising an imagined inner performance, but also testing out that performance herself on an instrument. Another situation occurs when seen from the perspective of the performer. Area B can be understood as a situation in which a performer not only makes decisions about style and personal expression, but also relies on her experience and understanding of musical idioms to 'become lost' and intuitively create forms of melody, harmony and rhythm based on varied real-time interpretation of either a piece of pre-composed music or a set of general rules about style, genre or song form etc.

Losing oneself in composition

As a means of reinforcing the point that composers can perform 'imaginally' (sic) Alperson refers to statements made in letters written by both Mozart and Beethoven. In the former Mozart described himself during the composition process as:

> *...being — completely myself, entirely alone and working over time from memory until the idea or motif is developed and the rules of counterpoint and peculiarities of various instruments then applied (Alperson 1991: 371)*

Similarly Beethoven described himself as:

> *...being able to see the 'image [of the music] in front of him from every angle, until only the labour of writing it down remains...' (Alperson 1991: 371)*

Both of these examples relate to composition as illustrated by area A in Figure 3. Beethoven's distinction between the imagining and the labour of writing his music serves to emphasise that for him perhaps writing was an ancillary task as the music had 'already been composed'. Both the above suggest that compositional activity can also be almost exclusively an internal one, separate from the 'documentation process' of writing. Though Alperson admits that the abilities of composers to engage in 'inward performances' may vary, so will the role of performance in their productive activity generally (Alperson 1991: 371). Those that find themselves in need of each can obviously make decisions to develop the necessary skills to operationalise them accordingly.

Losing oneself in performance

How close does an actual performance need to be to the notated intention of the composer? According to Wolterstorff (1980: 81), the performance of a piece is only required to "come fairly close to exemplifying the acoustic and instrumental properties normative within that work." This represents a 'proximity of recognition' that both allows for a continuum of 'identifiablity' at one end and the opportunity for innovation on the part of the performer at the other. Obviously, a step too far in the latter direction could render the performance into a derivative work rather than what could be termed a 'standard' performance.

Though the 'acoustic and instrumental properties' of various styles of e.g. jazz and world music cannot readily be generalized to a set of specific elements, they can be said to exist as a recognisable set of properties that span a number of semi-structured idioms. Thus it is 'acceptable' that interpretations can even be esoteric as they may still refer at some point during the structure of a piece to the received and accepted idioms of the original. In traditional jazz improvisation the practice of playing the 'head' or melody of a piece and returning to it periodically provides an iteration of what can be called the 'exemplification process' whereby even non-enthusiasts may recognize the melody.

In performances of other genres of music, though the performance of a piece is generally the instantiation (performed existence) of it, and as usually expected this would be within the proximity of recognition as outlined above. In many ways all performance of musical works involve improvisation.

> *Interpretation is the players conceptual realization of the musical score in performance, and, by necessity, interpretation involves improvisation. (Gould & Keaton 2000: 143)*

New iterations of musical interpretations can also be created in cases where the piece is construed to be variable, is intended to be improvised, or is simply chosen to be improvised by a performer. As Alperson (1991: 372) points out, the famous example of Cage's *4′33″ of silence*, the response of the audience and the ambient sounds that exist will always vary and produce a different experience each time. Equally, the variability of the improvised performance applies to works like La Monte Young's 1960 *Composition No. 7* (an interval "to be held for a very long time") or to the performance and improvisation of jazz standards like *Caravan*[11] or *A Night in Tunisia*.[12]

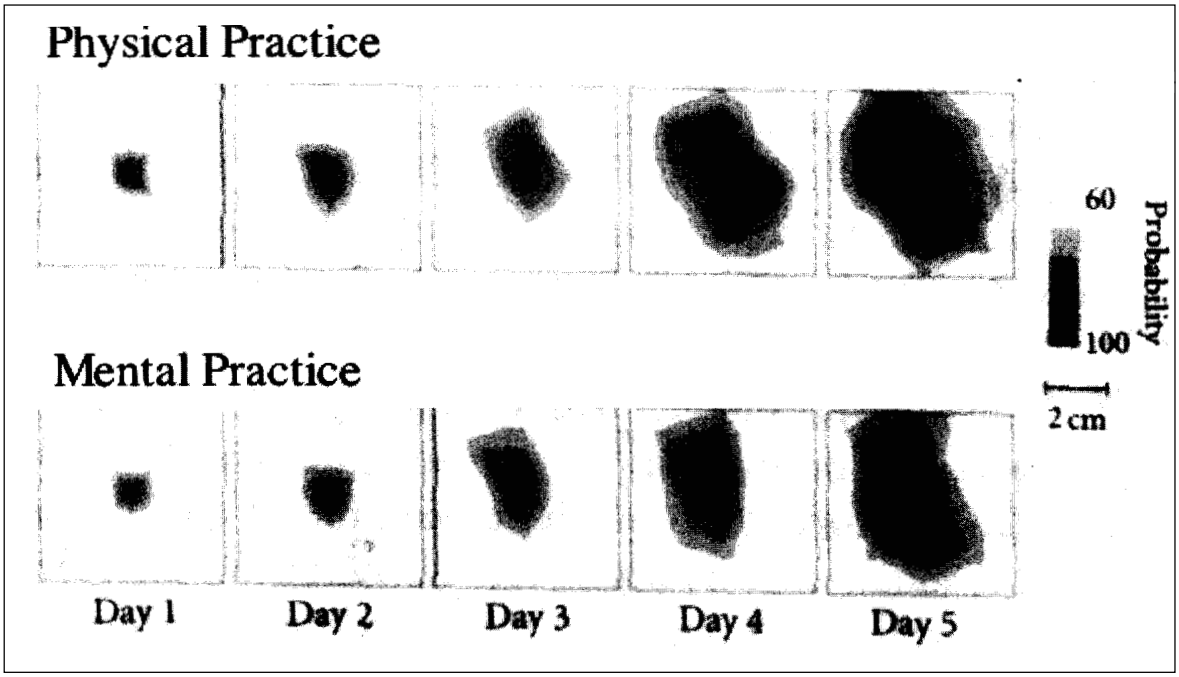
> *In improvisational performance, a collective creative process constitutes the creative product: an ephemeral public performance. (Sawyer 2000: 150)*

Sawyer's statement also iterates the medial aspect referred to by Gadamer in relation to the mode of being of the work of art.

As for the act of imagined performance for the performer, where a performer does not actually play an instrument but only thinks about playing or improvising a work, recent research using neuro-imaging techniques not available to Alperson when he wrote his original 1984 paper seem to corroborate his position that imagining and performing a work are largely similar processes. Recent developments in brain scanning technologies can now show the brain as it acquires creative and performative motor skills and suggest that simply thinking of performing a piece of music both practices and retains the necessary performing abilities.

Pascual-Leone (2004) conducted control mediated experiments using 'transcranial magnetic stimulation' (TMS) that is, the collection of images of a number of subjects brain activity during active performances of single hand exercises for keyboard. Data collected included variations in tempo accuracy, both before and after a practice sessions and with trained and 'untrained' hands over a fixed period. Results showed an increased activity in certain 'motor areas' of the brain that was retained over time as the participants achieved what was termed 'overlearning' (See Figure 4).

Figure 4. Cortical output maps for physical *vs* mental practice (Pascual-Leone 2004)



This retention of skill level demonstrated "trace or memory of the activation of the motor cortical outputs that took place during the performance..." In short the brain actually changes its structure, a process that Pascual-Leone calls 'plastic reorganisation' as instrumentalists learn new pieces.

The point for this paper is that that Pascual-Leone also found that in another related experiment, simply thinking about performing (without playing) created the same imaged activity in the brain and further, after a lapse in actual performing where the level of skill would normally drop, those who had only thought about performing re-acquired the skills necessary for near perfect performance much more rapidly than those who did not think of performing and almost as quickly as those who had actually performed.

If Pascual-Leone's work is correct in showing that imagining and performing a musical work are largely similar processes, then the processes at work in composing and notating music and imagining the performance of it as discussed above would appear to be of the same type of activity.

Conclusion

This paper has presented an inclusive and critical hermeneutic approach to understanding the process of musical creativity by looking at the overlap between composition, performance and improvisation rather than treating them as academically separate processes that require different methodologies. Gadamer's concept of play and the requirement of 'becoming lost' in the interpretation and creation of ones art provides useful insights into how we can understand the creative process, whether compositional, performative or improvisational, not only in music but also in the interpretation and expression of artistic works in general.

Though the problem of the hermeneutic circle means that there will never be true objectivity in understanding, this serves to highlight that understanding is always an ongoing process and like creative endeavour itself, is always changing and evolving into new forms of appropriation interpretation and understanding. As one becomes aware of the limitations of ones perspective or prejudices in a reflexive manner, this allows the process to continue afresh. For the arts, this can be seen as a good thing as art is concerned with expressing and imitating nature through the perspective or mirror of human experience.

The contextual approach of a critical hermeneutics provides a means to consider both structuralist and hermeneutic methods in the study and interpretation of composition performance and improvisation. It can help to explain what occurs during the creative process and how we may be able to use this to understand what 'being lost in play' entails. Similarities to the explanation of the creative act in the arts in *Zen* philosophy served to ground Gadamer's insights with what appears more cogency than a general aesthetic theory, though the point here is not to suggest that this is the only interpretation possible.

Finally, it has been argued that the three pursuits of composition, performance and improvisation overlap in both a conceptual and practical manner. Simply thinking about a creative act and imagining its public presentation, performance or exhibition, permits the exercise and or development of the creative act in a virtual internal 'personal space'. Recent developments within the neurological field have demonstrated the hitherto unknown relationship between thinking and performance, and highlights the artificiality between composition, performance and improvisation. As the science and technology advances, further evidence of these interlinkages is likely to emerge. In the meantime, for the theorists and musicologists, composers and performers these approaches hopefully present additional resources with which to examine and analyse their subject material or practice their art.

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Notes

[1] See Fournier (2001) for a consideration of structuralist and hermeneutic approaches using the perspectives of Thomas Kuhn's and Karl Popper.
[2] See Bourdieu (1988).
[3] However, as will be argued here, the hermeneutic process may allow us additional resources for reflection that may serve to contextualise any predisposition prejudice we may have, whether orthodox or otherwise.
[4] For the distinction and an explanation of the binary opposition between 'structuralist' approaches that depend "upon pre-existing analytical methodologies designed to derive musical meaning from the examination of the musical details of a work − or, as 'hermeneutic', holding that musical meaning resides in the relationship of the musical composition to a particular historical of cultural circumstance" see Fournier (2001).
[5] That is they can both provide material for an ongoing conversation.
[6] This also echoes Gadamer's use of Aristotle's concept of 'practical wisdom' known as *phronesis* (Aristotle Nicomachean Ethics).
[7] Paul Ricoeur's (In Thompson Ed. 1981) example of 'meaningful action considered as a text' illuminates the problem of hermeneutic method. See also Gadamer as considered in Bernstein (1983).
[8] These could also include algorithmic tools, computers and other devices.
[9] In the Zen study and practice of the arts (music, calligraphy, archery, flower arranging etc,) one must first study without doing for a very long period of time in order to internalise the form, function and concept of art before attempting to try to be an artist.
[10] See Alperson (1984).
[11] Composed by Irving Mills, Duke Ellington, Juan Tizol.
[12] Composed by Dizzy Gillespie and Frank Paparelli.

Santrauka

Panirimas į muziką: hermeneutinio proceso muzikos komponavime suvokimas

Šiame pranešime, nagrinėjant improvizacijai būdingą ryšį tarp komponavimo ir atlikimo, pristatomas interpretavimo mechanizmo suvokimo metodas komponavimo procese.

H. G. Gadameris yra rašęs apie „pasinėrimą į žaidimą“: kelias į suvokimą ir interpretaciją eina per pripažinimą; „tiksliai“ ką nors interpretuoti įmanoma tik tada, kai visiškai į tai pasineriama. Jis laikė, kad tik visiškai pasinerdami į žaidimą ir nepaisydami aplinkinių galime suvokti, ką mes galvojame apie kūrybą paties kūrybinio proceso metu. Jei, į ką nors pasinėrus ir atsiribojus nuo visokių mus veikiančių įtakų ir „išankstinių nusistatymų“, mus veikia įvairūs procesai, tai tokių procesų tyrinėjimas turėtų nustatyti, jog tarp suvoktų išankstinių nusistatymų ir interpretacinio veiksmo vyksta sąmoninga dialektinė veikla.

Pranešime teigiama, kad, pagal Gadamerio teoriją, išankstinį nusistatymą gali išreikšti taip pat ir išmokti dalykai, tokie kaip, pvz., muzikos ar džiazo teorija. Kad visiškai „pasinertum į žaidimą“ ir improvizuotum, reikia (nors tai ir skamba paradoksaliai) sąmoningai pamiršti muzikines struktūras kaip „ribojantį faktorių“, ir pasąmonėje leisti joms veikti improvizavimo procesą. Iš to galima daryti išvadą, kad improvizavimo metu vyksta hermeneutinis ciklas. Be to, norint pastebėti savo išankstinį nusistatymą, reikia leisti jam pasireikšti interpretavimo proceso metu, o tai reiškia, kad savo paties polinkių pažinimas veikia kaip savireguliuotojas interpretavimo veikloje, kuri kartu yra ir komponavimas, ir interpretavimas, ir atlikimas. Kuo giliau intuityviai suvokiamos mus veikiančios įtakos, tuo lengviau įmanoma interpretuoti ar suprasti savo meną.

Pranešime dar kartą apžvelgiama hermeneutinio ciklo problema, siekiama pabrėžti Gadamerio analogijos aktualumą, nagrinėjant šiuolaikinį požiūrį į kūrybišką komponavimą ir, remiantis džiazo improvizacija, kurioje susilieja tuo pat metu vykstantys komponavimo ir atlikimo procesai, įrodyti šios analogijos reikšmę suvokiant kūrybiškumą.

Nico Schüler

Creative Music Processes as the "Object" of Otto Laske's Cognitive Musicology

Introduction

Otto Laske is one of the leading scholars in the area of Artificial Intelligence and Music. He is he founder of "Cognitive Musicology," which roots in such disciplines as musicology, philosophy, computer science, psychology, linguistics, semiotics, and sociology. Besides his research in and across these disciplines, Laske combined his research with his artistic activities: composition and writing of poetry. Such interdisciplinary and inter-artistic thinking was necessary to create the Cognitive Musicology, of which the main focus is on creative processes. Hereby, "acousmatic" was a central category in his early writings, which are based on research by Pierre Schaeffer. Occasionally, Laske used the term "acoulogical" as a synonym for "acousmatic" (Laske, 1993a: 226), which is defined as "the process of omitting a consideration of sound sources, whether acoustic or electronic, in order to focus on musical sound as heard by a human listener, that is as a sound object, *objet sonore*." (Ibid.)

This article will provide some biographical, artistic, and research background of Laske's theories to eventually explain the role of "acousmatic" in his early work (1970s) – which has yet to be fully interpreted and understood.

Laske's research cannot be separated from his various activities throughout his career and from his artistic activities. Therefore, this article is in three parts: it will provide some biographical notes, then give an overview of Laske's compositional work (which is central to his research), and finally focus on Laske interpretations and further developments of Pierre Schaffer's acoulogical performance model of music. Eventually, the article will show how Laske went beyond Schaeffer and created what is now known as "Cognitive Musicology."

Biographical Notes on Otto Laske

To include some biographical notes on Laske seems necessary in order to understand the conditions for the development of Cognitive Musicology. The (biographical) sequence of Laske's studies, positions he held, and his activities are closely related to his research and his artistic output.

Otto Ernst Laske was born on April 23, 1936, in Oels (Olesnica), Silesia. Together with his mother and sister, he escaped from the oncoming Soviet armee in 1945, which brought him to Lilienthal, near Bremen (Germany), the city in which his mother was born. There, he soon started playing the piano. At age 11, he met his father, who had been a prisoner of war in the Soviet Union; still in a war trauma, Laske tried himself in writing poetry from age 13 on. Although he temporarily interrupted his piano studies and, thus, his musical activities, he never lost the contact to the music, as his family was very music-loving.

After a social-science diploma at the business high school in Bremen (1955) and after one year of administrative work, Laske started studying business administration in Göttingen in 1956. There, stimulated by the Sociological Institute, he started research on sociology. This interest in sociology brought him to the Goethe University in Frankfurt/Main and the Institute for Social Research (Institut für Sozialforschung) with Max Horkheimer and Theodor W. Adorno. While he abandoned his business studies, his sociological interest led him to studying philosophy, which he started (after a second, classical high school diploma) in 1958. In addition, he studied musicology from 1960 on (with professors Helmuth Osthoff, Friedrich Gennrich, and Lothar Hoffmann-Erbrecht) as well as English and American Language and Literature from 1964 on. After intensive studies of Greek philosophy, especially supported by Bruno Liebrucks, Laske wrote his dissertation under the supervision of Theodor W. Adorno on the dialectics of Plato and the early Hegel, which he completed in 1966.

During his academic studies, specifically from 1961 on, Laske continued his music-practical studies, as he picked up composition and studied Hindemith's *Untersuchung im Tonsatz*. From

1963 to 1966, Laske studied composition primarily with Konrad Lechner: first, at the Frankfurt Musikhochschule and later at the Academy of Music in Darmstadt. Besides his studies with Lechner, who specifically continued the tradition of Guillaume de Machaut and Anton Webern, the Darmstadt Summer Courses were very stimulating for Laske's musical developments, where he met composers such as Stockhausen, Ligeti, Boulez, and Babbitt. In Darmstadt, he also met Gottfried Michael Koenig in 1964, which became most crucial for the development of Laske's composition theory and Cognitive Musicology.

After completing his dissertation, Laske was a Fulbright Scholar from 1966 to 1968 at the New England Conservatory in Boston (USA), where he graduated with a Master of Music degree in composition. He then gained teaching positions, each for one year, as visiting professor of philosophy in Ontario (Canada) and as visiting professor of musicology (specifically the music of the Middle Ages, the Renaissance, and the Baroque) at McGill University in Montreal (Canada). Invited by Koenig, Laske taught and studied at the Institute of Sonology in Utrecht (Netherlands) from 1970 to 1975. During the time period from 1971 to 1974, he was holding a fellowship from the Deutsche Forschungsgemeinschaft (German Research Foundation) for the project "The Logical Structure of a Generative Grammar of Music." Besides his collaborations with Koenig and Barry Truax, the training in a classical electronic studio became very important for Laske. Here, influenced by informal studies of computer science (1972–1974), he developed the foundations for his Cognitive Musicology.

After two additional years of studies (1975–1977) in psychology and computer science as a post-doctoral fellow at Carnegie Mellon University in Pittsburgh, Pennsylvania, and after completing a year as guest professor at the University of Illinois in Urbana (1978–1979), Otto Laske's research was extensively focused on Artificial Intelligence. He worked from 1980 through 1985 as software engineer and from 1986 through 1991 – especially in Switzerland, Germany, and The Netherlands – as a consultant for the development of expert systems. In addition, he was a guest professor of computer science for one year at Boston College in Chestnut Hill, Massachusetts. Already since 1984, he was more interested in the process, through which one gathers expert knowledge (to eventually create expert systems with that knowledge), than in programming.

From 1981 through 1991, Laske was – initially with Curtis Roads – artistic director of the New England Computer Music Association (NEWCOMP). During this time, he organized 65 concerts for mixed media and taught courses on computer-assisted composition in Stuttgart (1981), Darmstadt (1981), Boston (1981–1984) and Karlsruhe (1988/89). In 1992, he turned towards developmental and clinical psychology (Harvard University), to gain the theoretical basis for a theory of coaching. From 1996 to 1999, Laske studied clinical psychology at the Massachusetts School of Professional Psychology and received a Doctor of Psychology (Psy.D.) with his dissertation on "Transformative Effects of Coaching on Executives' Professional Agenda" (1999). He founded the consulting form Laske and Associates LLC (2000), and later the Interdevelopmental Institute (2004) – an institute for advanced coaching and cadre education.

His early German and his English poems were published in *Schlesische Spachschmiede*, 1955–1995 (München: K. Friedrich Verlag) and *Becoming What I See: Poetry*, 1985–1995 (in preparation). A Festschrift was published in recognition of his scholarly and compositional work (Tabor, 1999).

Annotations to Laske's Compositional Work

Laske's manifold scholarly activities and, thus, the development of his Cognitive Musicology, are hard to separate from his artistic work (composition as well as poetry), because composition theory is in the center of both areas. For that reason, a brief overview of Laske's compositional work shall be provided here.

Between 1964 and 1970, Otto Laske composed – under the influence of his teacher Konrad Lechner ("micro-counterpoint") and of Darmstadt (Stockhausen) and Renato de Grandis – only instrumental or vocal music *without* the computer. However, already his Two Piano Pieces (1967–69) were composed "top down," as later with Koenig's computer program "Project 1." Laske met Koenig in 1964 in Darmstadt, and most stimulating was a lecture by Koenig on composing with computers, which contained the main principles of what later became "Project 1." This program for interpretative composition is the one program to this day that is primarily used by Laske. During

the early 1970s, however, Koenig's programs had little practical, but strong theoretical influence on Laske. Influences regarding counterpoint came from Avram David (Boston), while Robert Cogan (Boston) developed Laske's understanding of musical form. Overall, however, Laske remained autodidact.

Laske's music of the 1970s was influenced by the classical electronic studio: electro-acoustic music was dominating. He mainly used Barry Truax' POD. Many other works were only influenced by the (thinking of the) way in which computer programs work (for instance, *Quatre Fascinants* for 3 Altos and 3 Tenors, with lyrics by Renee Char, 1971), but only *Perturbations* for flute, clarinet, violin, violoncello, piano, and 2 percussionists (1979) was completely composed using "Project 1." In the 1980s, Laske wrote music for tape as well as instrumental and vocal compositions, whereby "Project 1" was the synthetic program for all compositions. An "electronic turn" came about with *Furies and Voices* for loudspeakers (1989–1990) – for which he used PODX (granular synthesis), – since melodic-rhythmic configurations of the 1980s tape compositions were replaced by a focus on density and sound color. This development continued in the 1990s, in which compositions for tape dominate, which are based on his own poetry: for instance, *Treelink* (1992) or *Twin Sister* (1995). Here, for the first time, Laske composed – with the help of Kyma – "bottom up," starting with the sound material. For the Third String Quartet (1992–1996) and his *Organ Piece* (1998–1999), Laske used, for the first time, "Project 2," but he 'returned' to "Project 1" with *Trilogy* for tape (*Echo des Himmels*, *Erwachen*, *Ganymed*; 1999–2001). And although Laske used Cmask after 2001, he once more 'returned' to "Project 1" with his Symphony No. 2 (2003–2004).

Laske's instrumental works often show differentiated "soundcolor-counterpoint," which is also effective with vocal parts, while *a cappella*-works frequently show harmonic experiments. In tape compositions of the 1970s and 1990s, a primary interest in sound is dominating, while the tape compositions of the 1980s are rather contrapuntal. For Laske, music is primarily a lyrical expression, to which epic and dramatic elements are subordinate. His music is, it its variety, a personal expression *via* new, technical means. It strives for expression through constructions that are created rich of relations to sound and meter.

Otto Laske discovered a substantial change within composers who work with computers: a change from model-based to rule-based thinking, despite the motivation within the developmental tendency of musical thinking to return to model-based thinking.[1] While in traditional compositional practice, existing music is the basis – the model – of composing, there is a new category – besides "existing music" – in composing with computers: "possible music". The latter is music "that can be envisioned by a musical expert on the basis of an abstract set of rules, on which a computer program is based."[2] These abstract sets of rules may, hereby, lead to new musical forms and means of expression.

Laske distinguishes three ways of composing with computers: score synthesis, sound synthesis, and *musique concrete*.[3] While computers are used as the sound source for sound synthesis, and as the sound-transforming instrument for *musique concrete*, score data – such as pitch, duration, dynamics, etc. – are, in score synthesis, being generated ("synthesized"), via a computer program, which are then – as a result of interpretation – notated, or translated into data for an orchestral language. Thus, Laske uses score synthesis for notated music as well as for tape compositions, which are based on sound synthesis (instead of on sound transformations). Hereby, the most important step is the interpretation of numerical data that could lead to totally different results. Laske uses score synthesis via Koenig's programs "Project 1" and "Project 2." Since score-based music is a special kind of music within the electronic realm, it is nowadays often called "score based sampling" and associated with Laske's name.

Almost all of Laske's instrumental and vocal works composed after 1971 are created using score synthesis, while all compositions for tape of the 1980s are based on "top down score synthesis," using "Project 1." Laske's compositions are, to equal portions, music for loudspeakers and instrumental chamber music (including music for solo instruments). Several pieces for loudspeaker set his own poetry to music; he does not use lyrics by other poets for his electronic compositions. In addition, there are numerous pieces for solo voice and chamber ensemble or music *a cappell*a, of which six are based on his own poetry.

For Otto Laske, composing is closely related to his scholarly activities: "But I'm not interested in programs or machines that turn out compositions. Rather, what has always interested me are machine that allow and invite reflection about the compositional process and that simultaneously lead to a compositional product." (Laske, quoted in Schüler, 1999: 149.) In this sense, Laske's artistic activity is a part of his scholarly research. However, since 1990 the emphasis on theoretical aspects of computer programs decreased in favor of their use as the basis for compositional thinking.

Otto Laske's Early Concepts of Musical Problem Solving and the "Acousmatic"

As mentioned above, Otto Laske studied and taught at the Institute of Sonology in Utrecht (Netherlands) upon invitation of Gottfried Michael Koenig from 1970 through 1975, at first as a freelance composer and then, from 1971 through 1974, as a fellow of the Deutsche Forschungsgemeinschaft (DFG). The project that was supported by the DFG was "The Logical Structure of a Generative Musical Grammar." Between 1970 and 1974, Laske wrote several research reports on generative musical grammars and musical problem solving that have just recently been published for the first time (Laske, 2004). A "generative" grammar is, hereby, a grammar that proceeds from grammar rules to a musical language that is derived from these grammar rules (in terms of synthesis); in contrast, an "analytical" (traditional) grammar is a grammar that is being derived from existing musical structures themselves. Laske's research on generative grammars is based on Noam Chomsky's mathematical linguistics. It was Laske's idea to represent — in a formal way — a general musical competence adequately with regard to its methodology. It was his goal that the generative model can be applied to various musical models.

Most important in the early development of his theories was one of his essays from 1971: *On Problems of a Performance Model for Music*.[4] It is a methodological paper on the application of the theory of automata to the problems of musical communication. The "automaton" is defined as a formal language that is based on an alphabet and on rules; it produces symbols that can be part of a final state within the language. Such "communication" is based upon two different kinds of knowledge: (1) knowledge that relates to the structure of the automaton, which is called "competence"; and (2) knowledge that relates to the manner in which such competence is being used, which is called "performance." The latter kind of knowledge, thus, relates to the *process* of communication. With such distinction, Laske tried to develop a theory of musical communication that aims at the *process of using musical competence*. While it is the goal of such automaton (a computer program for composition) to produce — with limited, well-defined rules — an unlimited number of "output," it is the goal of the theory of such automata to examine the process of the production of such "output" (e. g. musical structures, compositions, or parts of compositions). This production of unlimited output is "creativity."

Laske's early essay *On Problems of a Performance Model for Music* is not only based on Noam Chomsky's theories, but also on those by George A. Miller (on structures on behavior; Miller, 1960) and those by Pierre Schaeffer (1966). While Schaeffer distinguished between "objets sonores" and "objets musicaux," his book (Schaeffer, 1966) essentially dealt with "objets sonores." Without considering sound sources, Schaeffer wanted to understand the sound itself: "objets sonores." The process of this phenomenological intention is called *acoulogie*. While Schaeffer, and so Laske, had realized that music theorists had always focused on notation and acousticians had focused on physical sound sources, nobody had focused on the sound itself, irrespective of its source / production and its notation. "*Acoulogie* deals with ideas, the mental shaping of sound, and thus with listening, not hearing. Now, this approach followed Husserl's phenomenological reduction, where one only deals with the mental object, regardless of its objective existence, which in our case is the sound. Schaeffer put the actual sounds 'into brackets' (*epoché*). He aimed to understand the human *intention d'entendre* as a basis of a theory of listening, going beyond a mere theory of perception." (Laske, quoted in Schüler, 1999: 137–138.) Listening is a complex process that entails mental imagination and representation, and, therefore, problem solving. Thus, the initial focus on the acousmatic (in Laske's research synonymously used with "acoulogic") led Laske to go much beyond Schaeffer's types and classes of objets sonores and his speculations on the process of listening; as a result, Laske provided the basis for the development of theories of

musical problem solving and, eventually, a theory of musicality. "The part of the received-music domain that falls under grammatical constraints is referred to as the domain of sonology. Sonology is both a grammatical and a strategical, that is, problem solving theory of musical listening. Where sonology goes beyond both the grammatical and performance domain, it is a theory of auditory imagination forming part of epistemology and aesthetics. In terms of a grammar for music, sonology is a theory of the sonological component of a grammar forming an integrated componential structure with the syntactic and the semantic component of the grammar; while in terms of problem solving, it is a field that investigates sound and the perception of sound, leading to the design and testing of performance models for music, that is, of models of specific activities such as composition, listening, and others." (Laske, 1993a: 217)

Laske recognized that the acoulogical model of listening as Pierre Schaeffer had developed it was neither *formal* (i.e. investigating only the order and function of parts of musical activities) nor *explicit* (i.e. instructions that would enable the generation of the musical activity); however, Schaeffer's model made use of competence. The lack of this model was that it did not distinguish between competence and performance. Schaeffer, as expressed in his acoulogical model, assumed that musical creativity relies on performance, not on competence. It was Laske's achievement to realize the relationship between performance and competence, and that the three main components of competence – syntactical, sonological, and semantical – should not be ignored or misconstrued. While Schaeffer's two types of recognition – *entendre* and *comprendre* – were acousmatical, abstracting from sound production and from sound sources and thus dealing "with independent structures independently of their physical measurability" (Laske, 1971b: 36), Laske's search for musicality was sonological in nature, showing the relationship between sound objects and possible syntactical configurations. Laske's model went beyond the pure acoulogical one in that it was concerned with the relationship between the acoustical, sonic[5], and syntactical realms of music. Thus, Laske's sonological research contained references to grammatical components that Schaeffer's *acoulogie* ignored. Laske pointed out that "even for purely sonological purposes – such as comprehending simple intervals or some perceptual quality of a sound sequence – a knowledge of the psycho-acoustic features of a set of sounds is insufficient. The indeterminacy of the acoustic domain indeed seems to be a fundamental property of musical sound, just as is the case for human speech sounds. We can conclude from this indeterminacy that only by taking music-syntactic and music-semantic information into account can a human listener comprehend sound configurations..." (Laske, 1974: 36)

Final Remarks

As mentioned earlier, Laske's manifold scholarly activities and, thus, the development of his "Cognitive Musicology," are hard to separate from his artistic work (composition as well as poetry), because composition theory is in the center of both areas. The research on musical processes is hereby of special importance, because musical processes can be modeled procedurally via computer programs. And it is no surprise that composition knowledge is the starting point of this research for several reasons: first, musical communication begins with the *activity* of composing (or improvising); second, Laske was unhappy with his own *hidden* compositional knowledge; and third, up to the 1970s the explication of musical knowledge was only informal, instead of explicit through computer programs, and even computer programs for algorithmic composition offered only an incomplete representation of musical knowledge.

Especially with his work in the area of expert systems, Laske realized that much more flexible systems of the representation of musical knowledge are possible. He expanded his methodological approach with regards to the search for a theory of musicality in the broadest sense. Therefore, the goal of this Cognitive Musicology is to create models of musical intelligence, to develop an empirically based theory of musical intelligence. The computer is the most important tool to formulate theories of musical activities that are empirically verifiable. Hereby, musical competence and performance (activity) as well as musical artifacts are going to be examined in their polarity, which means that the examination of musical artifacts has to occur not only in themselves, but also with regards to its underlying competence and performance. Music will be designed as a series of *tasks*, of which cognitive structure and processes are to be explored. To have developed such a

methodology is the result of Laske's research in linguistics, but especially in psychology, computer science, and Artificial Intelligence. Music is understood as a cognitive achievement, which requires – in order to understand it – a structural as well as procedural analysis of tasks. For instance, reading and analyzing a specific score by conductors, musicologists, historians, and music theorists are different tasks (performance), although they all require a common musical competence. From this perspective, even musicology itself becomes a task, and the research on its structure and its process is a goal of Cognitive Musicology.

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Notes

[1] See especially Laske's unpublished manuscript on "Die Integration neuer Technologien in die Denkweisen des Musikers," 1989, p. 3.

[2] Ibid. The original reads: [Musik] "die sich aufgrund einer abstrakten, in einem Computerprogramm niedergelegten Regelmenge von einem musikalischen Experten imaginieren läßt."

[3] See Otto Laske's unpublished manuscript "Sieben Antworten auf sieben Fragen von N. Schüler," 1994.

[4] This essay was originally published in English as Laske 1971a. Its German translation can be found in Laske, 2004, pp. 35–85.

[5] "Sonic" properties are asyntactical as well as acousmatical. They "are thus intermediary in relation to the acoustical and sonological realms. Although equally acousmatical, sonological criteria stand in definable relations to syntactical features." (Laske, 1971b: 40)

Santrauka

Muzikos komponavimo procesas –
Otto Laske's kognityviosios muzikologijos „objektas“

Pagrindinis O. Laske's kognityviosios muzikologijos objektas yra kūrybiniai (specifiniai muzikos komponavimo) ir bendrieji muzikiniai procesai. Jo muzikologinius tyrimus sunku atskirti nuo jo meninės – kompozitoriaus ir poeto – veiklos. Nors Laske garsėja kaip kognityviosios muzikologijos kūrėjas, jo darbai dar nėra labai plačiai žinomi. Šiame pranešime detaliau supažindinama su Laske's kognityviąja muzikologija ir jo muzikinių procesų tyrinėjimais.

Laske teigė, kad muzikinius procesus gali imituoti kompiuterinės programos, kurių veikimas yra panašus į tradicinius muzikinius procesus, taigi gali būti vienodai sėkmingas arba nesėkmingas. Pagrindinis jo tyrimo objektas yra komponavimo procesas. Laske vienas iš pirmųjų sudarė kompiuterines komponavimo programas, imituojančias tradicinius komponavimo procesus. Šiame pranešime, kuriame ypatingas dėmesys atkreipiamas į kelis jo ankstyvuosius (1970–1974) dar nepublikuotus darbus (juos spaudai šiuo metu rengia pranešimo autorius), pirmąkart išsamiai nagrinėjama O. Laske's sukurta muzikos teorija.

Būdamas filosofas, Laske domisi muzikiniais procesais kaip epistemologine problema: muzikinė *veikla* yra muzikinio bendravimo proceso išeities taškas. Tyrinėdamas kompiuterines sistemas, jis padarė išvadą, kad muzikos mokslui gali atstovauti daug lankstesnės sistemos nei tos, kurias siūlo tradicinė muzikologija, ir šiomis įžvalgomis jis išplėtė savo metodologinius tyrinėjimus, siekdamas sukurti bendrą muzikalumo teoriją. Jo kognityviosios muzikologijos tikslas – sukurti muzikinio intelekto modelius, pagrįstus empiriniais tyrinėjimais. Ši metodologija – tai Laske's muzikologinių, lingvistinių, psichologinių, kompiuterinių ir dirbtinio intelekto tyrinėjimų rezultatas.

Rimantas Janeliauskas

M. K. Čiurlionis' Unrecognized Cycle (1907, Druskininkai-Warsaw)

Introduction

A cyclic thinking characteristic of Mikalojus Konstantinas Čiurlionis, the great Lithuanian composer, is witnessed by a wealth of cycle-based paintings. His rather copious piano works, however, do not distinguish themselves by cyclic references. The things that one cannot help noticing are a great number of untitled works and their seeming incompleteness as we shall later see for ourselves. This vein of writing music – without marking and completing works – greatly reminds of a spontaneous writting idiom, moreover that it is partly witnessed by "flashes" of dating his works and "scattered" authographs.

The composer, judging from the reminiscenses of his contemporaries, was a highly consistent and integral personality devoted to creative work. It is reasonable to ask, therefore, whether his piano works hide a more profound and integral content than their outer "inventory" shape. An attempt will be made to answer this question in the present study.

The analysis is based on five piano works written by the composer in the summer and autumn months of 1907 in Druskininkai and Warsaw (VL 309–313).

The sections of the study are projected employing special methods in order to define the features characteristic of the cycle, i. e. for probability – prognostic, a cyclic form – structural, the full reading of the text – intentional, and for the marking of the boundaries of the work – identification method.

A graeat many musicologists and art historians point out aspirations of Čiurlionis' genius to reach an organic integrity and a cyclic thinking, which has a tendency to turn almost all his work into a cycle (V. Landsbergis, D. Kučinskas)[1]. Furthermore, nearly each Čiurlioniana text, whatever it may deal with, more or less touches upon the topicalities of the cycle – a musical text, genre, form, style peculiarities, painting, verbal texts, world perception and the like. However, despite dozens of hints, Čiurlionis' spontaneous musical cycles have not been disclosed. Nobody has ever made a suggestion about the composer's similar works and their articulation.

And what is more, the composer's works are very often artificially grouped by editors in the collections of the composer's works (JČKF, VLKF).

Prognosis of the Cycle

It is worthwhile to start this section with the review of the grouping of the works – objects of our interest – by editors in their collections (Scheme No 1):

Scheme No 1

VL	309	312	310	311	313
JČKF: *Four Preludes*, Op. 26			No 3	No 4	
Four Preludes, Op. 27	No 2	No 3			
VLKF: *Storms and Depts*	VII	VI	V	I	VIII

Both in the opuses compiled by Jadvyga Čiurlionytė and the cycle formed by Vytautas Landsbergis a slight attention is paid to chronology. However, when grouping works, they are selected modelling a certain cyclic character reminiscent of a key plan as well as contrasting the tempos and texture of the works. The primary works belonging to the supposed cycle can be found in *Four Preludes* grouped by J. Čiurlionytė (Op. 27, No 2, 3). This opus is noted for its key plan which rather brings to mind the model of a melody-filled passage after a leap (B-flat m-F-Gm-Am).

Two more works are included in another opus (Op. 26) whose model of the key plan is akin to a recitative at an interwal of a third (Dm-Dm-Dm-Bm). All the works in the supposed cycle can be found in the eight-work group *Storms and Depths* (VII, VI, V, I, VIII) formed by V. Landsbergis.

Both Čiurlionytė's Op. 26 and Landsbergis' eight-work cycle stand out for their analogous key-based model of the sequence of works – a leap (Am-B-flat m and Fm-Dm) and a filling (Am-B-flat m-Dm-Bm). Having in mind the composer's spontaneous character of creative process, this kind of grouping works into cycles does look not enough natural. It was easy to notice that the same works were included in different groups compiled by the editors. It provokes one, therefore, to search for more solid criteria legalizing the composer's spontaneous cycle. One of them – a thorough motivation of the chronology of works. That is why the dates indicated by the composer and the place of authographs in manuscript books alike should be taken into consideration.

The below-presented scheme specifies more detailed chronologies of the works in question (Scheme No 2):

Scheme No 2

	I	**II**	**III**	**IV**	**V**
JČ:	Op. 27/2	Op. 27/3	Op. 26/3	Op. 26/4	Op. 27/4
KJŽ:	649	650	645	646	651
VL:	309	312	310	311	313
DK:	239	245	240	243	246
Čm21:	246 19 m.	247 13 m.	234–235 unfinished 26 m.	240–242 $_{1-2}$ unfinished 27 m.	248–250 unfinished 42 m.
Author:	1907 Drusk.	1907 Warsz.	Warsz., 1907; C	Warsz., 1907; C	–
Dates (DK):	1907.07 Druskininkai	Autumn of 1907 Warsaw	Autumn of 1907 Warsaw	Autumn of 1907 Warsaw	Autumn of 1907 Warsaw

In the scheme, the works are indicated in the supposed cyclic's order (I–V). It is easy to notice that all the known chronologies (JČ, KJŽ, VL, DK) of the composer's works do not consistently conform to the sequence of the supposed cycle of works. The composer's manuscripts, therefore, are of paramount importance here.

The works belonging to the unrecognized cycle find their reflection in the composer's manuscript book (Čm 21). This 260-page book, as D. Kučinskas notes, includes the compositions written in the period between 1896 to 1908. The pages contain 12 staves[2]. The cycle under investigation is written down on some of these pages (Scheme No 3):

Scheme No 3

	233	– Prelude in F-sharp m, DK 226
(III)	234–235	– Prelude in G m, DK 240 (VL 310)
	234_{7}	– Unindentified work in C, DK 240
	236–237	– *The Sea* for piano, DK 265 (VL 317)
	238_{1-8}	– Unindentified work in C, DK 240
	238_{9-12}–239_{6-7}	– Sketch, DK 242
	239	– Sketch, DK 241
(IV)	240–242_{1-2}	– Prelude in Am, DK 243 (VL 311)
	242_{3-10}	– Prelude in F, DK 244
	242_{11-12}–243_{11-12}	– Harmony exercise in Am, DK 1.2.53
	243	– Fughetta in Am, DK 263 (VL 316)
	244	– Prelude in Dm, DK 238 (VL 308)
	245	– Fughetta, DK 264 (VL 315)
(I)	246	– Prelude in Dm, DK 239 (VL 309)
(II)	247	– Prelude in Dm, DK 245 (VL 312)
(V)	248–250	– Prelude in Bm, DK 246 (VL 313)
	$251–252_{1-8}$	– *The Sea* for piano, DK 265 (VL 317)
	252_{9-12}–253	– *The Sea* for piano, DK 265 (VL 317)
	254	– Prelude in Gm, DK 266

The works presented in the extract from the manuscript book were written in the period between 1906 to 1908. When selecting essential authographs (I–V) of the cycle, the dates indicated by the composer should be considered as a primary criterion. The composer, as we have noticed, had indicated the dates of the works which are the objects of our present interest (I–IV). The fifth work is undated, but its chronology can be established according to the position of the manuscript in respect of other dated works. Thus Prelude in Bm (DK 246, p. 248–250) immediately follows Prelude in Dm (DK 245, p. 247). The position of the authograph is considered an important criterion judging about the most probable chronological sequence of the works, however, it does not necessarily coincide with movements of the supposed cycle. One can judge from the extract taken from the book contents that later dated authographs find themselves on the earlier pages of the book, comp. DK 243 (Warszawa 1907, C) with DK 239 (1907 Druskininkai). Even a more evident interchange of the manuscript pages and dates can be noticed among other works – DK 265, 263 (both authographs bear the date: Vilno 1908). Subsequent pages are of interest due to the authographs bearing earlier dates (DK 244 – 1907 Lipiec, Druskieniki, similarly others – 239, 245). It is, therefore, reasonable to assert that the composer wrote his works without observing a pedantic sequence of the manuscript pages and the dates of his works. A similar "scattering" of works among the manuscript pages can speak of the following two things.

First – the composer writing some work would leave some blank pages most likely intending to continue and complete it, and second – to write down other pieces on blank pages (possibly lacking music paper "at hand"!). The manuscript scheme shows that among the works of the supposed cycle as well as those written prior and after them rank quite a number of "inserted" works, the greater part of which are undated (DK 204–242, 244, 264 and 226 as well as 265–266 and others).

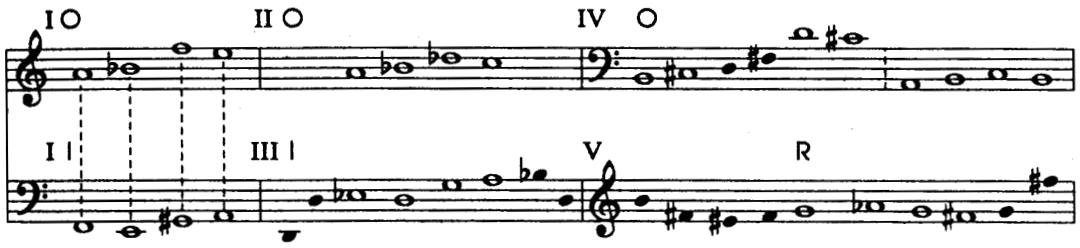
The analysis of the placement peculiarities of the manuscript authographs leads to the conclusion that the sequence of the cycle's works cannot be principally based on the peculiarities of the chronology of the works. Still, a chronological analysis enables one to perceive a certain possibility of the existence of the supposed cycle. Primarily it is witnessed by a rather systematic dating of the works by the composer himself, embracing even four out of five works from the supposed cycle. Whereas the manuscript book partly helps to define the position of the undated work (V) and the possibility of its belonging to a cyclic system. On the other hand, the manuscript book also presupposes the question whether the composer's all dated works make up an integral cycle and whether there rank no works among them belonging to some other cyclic system. An extract from the manuscript authographs contains a dated work (DK 238) which looks particularly unexpected. A further structural analysis of the works belonging to the cycle should most likely fascilitate the solution of this collision.

Structural Character of the Cycle

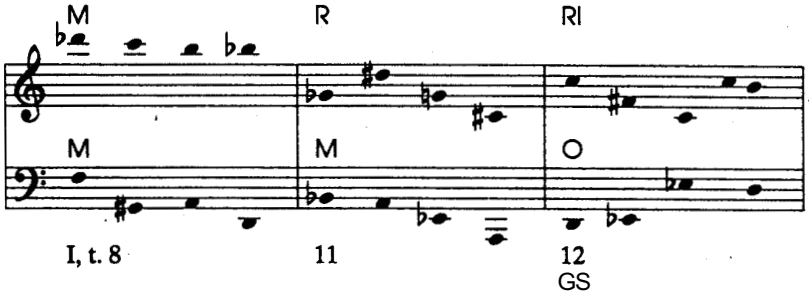
The most evident community of all the movement of the cycle seems to disclose itself through a two-directional (rising and falling) intonation of seconds. One second can be separated from another by a narrower or wider interval (Example 1). In movement I these intonations at the beginning sound simultaneously in the melody and the bass (here their shapes are indicated: in the original – O and the inversion – I). In the middle movements (II and III) similar intonations can be also observed from the very beginning in the melody (II O) and the bass (III I). They manifest themselves slightly different in movement IV. Now the melodized original sounds in the bass (IV:O), and in movement V this intonation bearing a retrograde shape is vowen into the melody (V:R).

Of interest is the expression of these two-directional seconds undergoing intoning inside the movements. The shapes of intonations or their registers get inverted when the section of the golden proportion of a separate movement is reached. In movement I the golden section (GS) falls on measure 12 (Example 2). Here intonational shapes are inverted in respect of the register – what was characteristic of the melody now sounds in the bass (O), and in the melody we can notice only retro-inversion (RI) under modification. In movement II intonations get inverted in the primary one third of the form (Example 3: GS, m. 5–6). And so we can state that the primary original of the movement turned into RI. This shape particularly catches one's eye due to secret slides of seconds in measure 6. In movement III one notices intonational replacement of the melody and the bass

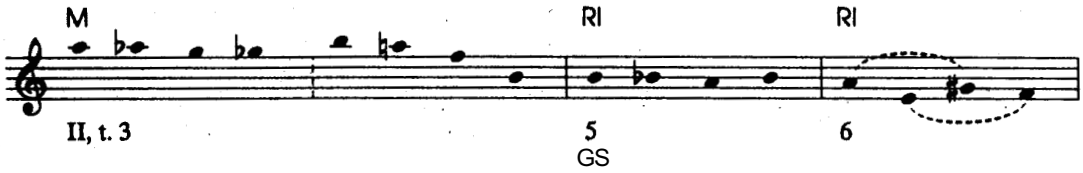
Example 1



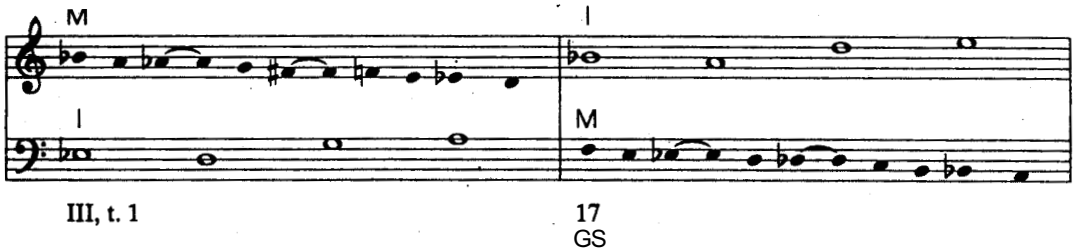
Example 2



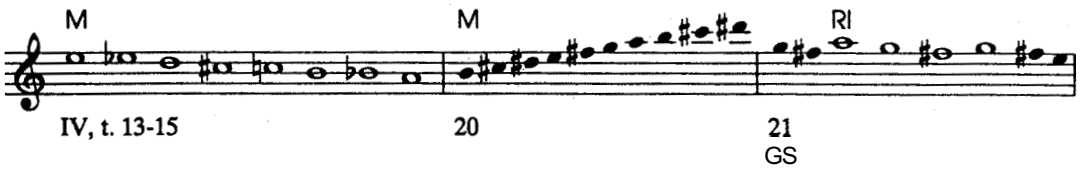
Example 3



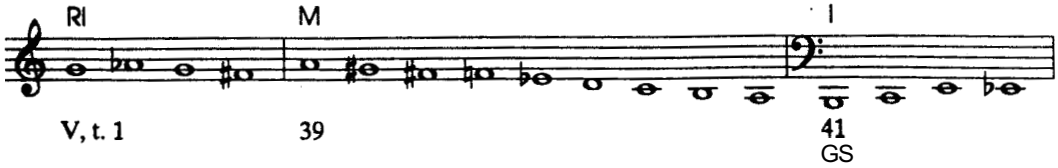
Example 4



Example 5



Example 6



(Example 4: GS, m. 17. I). In movement V after the golden section, the intonation of retro-inversion is woven into a melodic line instead of the known original in the bass at the beginning of the movement (Example 5: RI, m. 21). Finally, at the end of movement V an inversion sounds in the bass (Example 6: I, m. 41). After movement V, as we shall make sure, a return of movement I follows, and the marked measure (m. 41) will coincide with the golden proportion.

The noticed inversions of characteristic intonations, comparing their shapes at the beginnings of the movements and within the limits of the golden section, are also accompanied by another regularity namely, intonations are inverted, as a rule, through the mediation of mixed intonation (M) marked by one-way sequence of intervals. The basic shapes of mixed intonations are also reflected in previous examples (Examples 2–6).

The presented intonational outline of the cycles's movements has not much in common with other beside written authographs in the manuscript (DK 238, 266). The first of them is noted for its one-way intonations of seconds and forms another cyclic system with two other works[3]. The second authograph both in respect of its character and intonations highly reminds of Čiurlionis' early period of work. Whereas other intervening positions of the manuscript authographs (DK 241, 242, 244 and others) do not stand out for any two-directional intonations of the seconds. Thus one can be sure enough that the works under discusion and only those among them, do belong to the supposed cycle.

Another, no less pressing issue, is to establish a succession of works in order to form a cyclic form.

The key plan could serve for the primary criterion of the sequence of the cycle's movements. Then they would logically follow the below-indicated order (Scheme No 4):

Scheme No 4

I (VL 309)	II (VL 312)	III (VL 310)	IV (VL 311)	V (VL 313)	VI (VL 309)
Dm	Am	Gm	Am	Bm	Dm

This sequence of the members of the key plan is mostly motivated by the ends of the supposed unfinished works (III–V). The latter are marked by the leading or semitone attraction of the phenomena to the tonic of the next movement or its initial chord. For example, movement III ends in a chord (E-flat-B-flat-c^2-a-flat^2, m. 26) all sounds of which potentially distance themselves at a semitone from the initial chord sounds of movement IV (B-D-G). Here it is not important whether these semitones interrelate being distanced at one or more octaves. It is common knowledge that in a harmonic system it is an octave equivalent of sounds that is effective. It is noteworthy to stress that all the tones of the final chord in movement III are also oriented through an oppositional attraction of semitones to the tonics of the next movement (a-c-e, m. 1, second half). The common tone G makes the only exception. Similarly the end of movement IV "moves" to movement V, i. e. the final chord (C-E-G-B-flat, m. 27) as if resolves in the tonic of the next movement (B-D-F-sharp, m. 1). The following sounds interrelate at a semitone: C and B, G and F-sharp, E-flat and B, but E and D make an exception. Movement V is also not traditionally finished. Alike other movements, it does not possess a conventional cadence. However, its final chord (G-D-B-flat) is marked by a functional attraction of the subdominant to the basic key of the cycle of D minor. On the basis of the attraction analogy of the earlier supposed unfinished works one can presuppose an obligatory return of movement I at the end of the cycle.

Motivating the key plan of the cyclic movements, it is necessary to specify the indicated key of the second work in the chronologies worked out by musicologists. In the opinion of J. Čiurlionytė, the latter work is written in D minor. She, as the editor, even indicates the key signature of D minor (JČKF). V. Landsbergis, taking into consideration an authograph, does not indicate key signature at all.

The key of the second work is supposed to be A minor. It is explicitly witnessed both by the opening and closing tonic (a, A) of the work and an evident expression of the basic functions of the harmony (of the dominant and subdominant). On the other hand, the key of this movement is closely associated in a cyclic way with the key of D minor in movement I, the traces of which are also felt in movement II.

The most telling mark of this trace – the emergence of the Phrygian subdominant after the dominant harmony (II, m. 3–5, 9). Hence, the key plan distinguishes itself by certain features of the cyclic nature. The first two movements interrelate through an opposite relationship between the tonic and dominant keys characteristic of sonata-form expositions. Other two movements (III and IV) are notable for their key functions typical of development division. As usual, development begins with the subdominant key (it echoes G minor of movement III) and ends in a dominant preixtus (A minor of movement IV). The recapitulation of the cycle (V–IV) modifies the dominant relationship of the first two keys (Dm-Am) to subdominant one (Bm-Dm).

This logic of the key plan is further detailed by the relationships of each movement. On the whole, the latter are marked by the alternation of opposite major and minor keys. This alternation on the most general scale, having in mind the largest sections of separate movements of the cycle, is illustrated by the following scheme (Scheme No 5):

Scheme No 5

I	Dm – F	
m.	1 5	
II	Am – A	
m.	1 13	
III	Gm – C	G – Cm
m.	1 10	18 24
IV	Am – Em (S)	
m.	1 18	
V–VI	Bm – D	Dm – F
m.	1 14	1 5

In separate movements, as one can notice, function various types of minor and major keys: parallel (I: Dm-F, V: Bm-D), one-name (II: Am-A) and fifth-fourth (III: Gm-C or G-Cm). The system of later relationships also peculiar to the keys of movement IV (Am-Em). Finally, the second division of movement V interrelates with the beginning of movement VI (the return of movement I is kept in mind) through one-name keys (D major). Our analysis shows that the inner content of these keys is based on the cycles of major and minor thirds. Thus, all the movements of the cycles disclose a certain integral principle in the alternation of major and minor keys, basing a slightly lower "mega" level of the cycle's key plan. This level is of interest due to the fact that it continues penetrating through its logical branches, touching even the smallest levels of the cycle's harmonic system.

For the sake of evidence it is reasonable to compare more detailed schemes of movement III and movement IV (Scheme No 6 and 7):

Scheme No 6

Movement III

Section I: Gm - Bm - Gm - [B-flat m - F-sharp m - Dm]
m.: 3 6 7 8
Section II: C [- G - E - C-sharp A-
- E - C-sharp- A- F-sharp-
- C-sharp- A-sharp- F-sharp- D-sharp]- Dm
m.: 10 12----------16 17
Section III: G - C Cm - Gm
m.: 18 21 24 25

Scheme No 7

Movement IV

Section I: Am - Cm - Am - Cm - Am - Cm - E-flat m - F-sharp m
m.: 1 5 7 13 15 16 17
Section II: Am, Em - B [C - D - E], Em - Am - B - [A-flat - B-flat - C]
m.: 18 21 22 23 24 25 26 27

The harmonic-key logic in movement III brings out even three sections of form (m. 1–9, m. 10–17 and m. 18–26) and in movement IV – two (m. 1–17 and m. 18–27).

The first section of movement III represents the cycle of key relationships between major thirds from sound B-flat, whereas the second — those of the minor ones. The latter is marked by the chains of sequences at minor thirds downwards (from the sounds G, E and C-sharp). Here oposite details of relationships come to the fore. The cycle of major thirds descends by way of minor keys (Bm-F-sharp m-Dm, 1st section) and *vice versa* – by minor thirds those of major (G-E-C-sharp-A – and the like, 2nd section). An oposite exposition of the key relationship, i.e. of the cycles of major and minor thirds could recall, as it is peculiar to a sonata form, the arrangement of the principal and subordinate theme on the plane of harmony. The key logic of the third section does not contradict this prerequisite. Here one can discern the digest of the harmonic-key development of the entire movement transforming modes of each keys. The movement, starting in the key of G minor (1st section) and later exposing C major (2nd section, here it is worth to notice the culminating D minor of this section), ends in a modal modification of its previous keys (G-Cm, m. 18, 24). Thus the two sections of the recapitulation (this is how the 3rd division can be called) stand out for the inversion of their major and minor keys in comparison with the basic keys of the exposition. Besides, the modal continuity of these keys is also worth of thinking (G-C and Cm-Gm) over.

Movement IV seems to be a consecutive continuation of the previous harmonic-key development. The first section of this movement realizes the cycle of minor thirds but differently from previous movement. Now the minor thirds serve for the raising of minor keys (Am-Cm-E-flat m-F-sharp m). Whereas the second division fills up the cycle of major thirds with major seconds (C-D-E and A-flat-B-flat-C). In these positions (at least marginal) filled with seconds, the cycle of the ascending major thirds becomes apparent (C-E and As-C). The ascending cycle of major intervals is represented by major keys. Hence, both cycles in respect of the previous (III) movement are not only replaced (here the previous is of minor thirds and there – of major ones), but also ascending. Furhermore. The keys are represented differently. Now the cycle of minor thirds is represented by minor keys (in the previous – major) and that of major by major (there – minor). It leads to the conclusion that movement III and IV are not only an organic continuation of the harmonic development but also can inverse addition to each other. Following a harmonic logic, the key plan of movement III is particularly close to sonata-form (without development) principles. Movement IV, however, would mostly recall the compensated development division for the previous movement (III). As it is known, the development episodes are usually opposite to expositional ones.

Here are presented some more noteworhty details before finishing the comparison of the keys in both movements.

The second section of movement IV is composed in the basic key of E minor which reinforces itself due to the subdominant and dominant keys. The first sequential progression of the major keys along the major seconds (C-D-E) ends in a rather ambiguous way. Here the marked tonic in the key of E major is principally represented by one of the possible members of the major thirds cycle, i.e. by E major six-chord from E (other members of this chain are six-chords from C and G-sharp). This first inversion of the chord, however, in respect of the basic key of E minor, interpreting traditionaly, is E minor tonic with a sixth (E-G-C). The ambivalency of the first inversion of the chord (member of a major sequence or a minor tonic with a sixth) connects the basic key and its functional satellites with the cycle of the major intervals and the major keys.

The opposite character of the key-harmonic development (transpositions of the cycles, directions of the intervals and modal transformations) seen in the middle movements (III–IV) forms a kind of a concentric axis for the entire cycle. The rest movements in respect of their harmony and keys reflect and continue the mentioned symmetry. Movements I and II reflect movements V and VI in a reverse order. In a word, the lateral pairs of the movements compose an arch of concentric symmetry. In a traditional aspect it is somewhat reminiscenting the mirror of the themes in the recapitulation. Whereas movement V is marked by two sections (m. 1–13 and m. 14–42). Each of them possesses their individual key plan (Scheme No 8):

Scheme No 8

Movement V

Section I:	Bm	–	F-sharp m	–	Em	–	Bm	
m.:	1		5		7		12	
Section II:	D(VI)	–	Am	–	F	–	Am	– C
m.:	13		20		22		24	30

The first section of this movement distinguishes itself by a controversial functional sequence of the keys – the subdominant key (Em) follows the dominant (F-sharp m) one. A similar controversy has beem noticed in movement II (there E and Dm, m. 3–5) which linked the latter with the key of the opening movement. A functional controversy of movement V links the latter with movement VI in a similar way. Having in mind the importance of the major and minor harmony for the composition of the cycle, it is easy to perceive a constructive link of the F-sharp minor tonic with the tonic in the final movement (D-F-A). The sound F-sharp in respect of the latter potentially becomes a major variant of the minor tonic. It is evident, therefore, that both final movements are interdependent due to a kinship of their keys. Still, differently from the initial movements, which were bound together by the subdominant key (Dm) of movement II, the final ones are linked by the dominant (F-sharp m) of movement V.

The folowing section of movement V is noted for its synthesized expansion of the key plan (section II). Now slowly, by way of a diatonic chain of the thirds in the major and minor keys, ascent is made until the very culmination of the cycle (D-Am-F-Am-C). It is worthy of mention that this chain of thirds contains neither purified nor key cycles and separate keys. Here seems to be a mixed case which harmoniously tunes up the opposite harmonic-key peculiarities of this expansion. One more detail should be also mentioned here. The direction of the keys is ascending. And where is its descending position? Its descending position can be traced in the climax of the movement (m. 37–39). Here the decending slide of harmonies displays itself at its end by shape "tone-semitone" scale in melody (m. 39). It is this modus (also called the Rimsky-Korsakov scale or the second modus of Messiaen) that fills the cycle of minor thirds with seconds and in this way finishes that what was performed in movement IV, filling major thirds in a similar way. The end of the culminating passsage is resuming. Here we can notice a functional controversy of harmonies (F-sharp m-Em, m., end of 39–40) directing to the final movement (VI) of the cycle. The preparation of the discussed culminating episode is also noteworthy (m. 35–36). The bass line is structured by means of the ascending sequence – the chromatically filled cycle of major thirds articulated by the *arpeggio* of major thirds. Therefore, the last section of movement V can be considered as a kind of the finish of the previous movements, i.e. – the fillings at seconds of the cycles in major thirds with the trajectories of not yet exploited directions, the mixing of the relationship between the opposite modal key and that of the thirds, and the like.

On the other hand, the second section in question preserves certain initial features of the cycle's movements namely, a parallel relationship of the keys, intervening into a diatonic chain of thirds (Am-C). But on the scale of the whole movement this relationship articulates its both main sections (Bm-D). Movements I and VI are also marked by a parallel relationship of its inner keys (Dm-F).

Intentionality of the Cycle

It is known that Čiurlionis usually marked only notes[4]. It stands to reason, therefore, that giving arguments for the entirety of the cycle it is necessary to discover motives which could fill up this gap. Alike the supposedly unfinished works are characteristic of Čiurlionis' heritage, similarly the unmarked tempo, dynamics, phrasing, and other parameters of his works can be principally conditioned by intentional motives of the cycle. Here we employ the term "intentionality" for the parameters unmarked by the composer but inseperable from the entirety of the cycle. The glance of intentionality makes possible to frame a hypothesis that this method of notation practiced by the composer is an original economical quality of writing, therefore, a researcher's task should be only to guess the unmarked values of musical parameters.

There is no doubt that the multimovement entirety of the cycle cannot be imagined without proportions. Thus, a particular attention should be paid to the establishment of the correct tempos of individual movements.

Let us have a look at the references of tempos fixed by the editors of the composer's works. For the sake of thoroughness, the below-presented scheme also shows the metres and keys of the works (Scheme No 9):

Scheme No 9

Movements of the cycle	Tempos (VLKF)	Tempos (JČKF)	Metres	Keys
I (VL 309)	*Andante espressivo*	*Andante espressivo* M.M.♩ = 76	4/4	Dm
II (VL 312)	*Allegro risoluto*	*Presto* M.M. ♩ = 112–116	4/4	Am
III (VL 310)	*Andante*	*Andante* M.M. ♩ = 77–86	4/4	Gm
IV (VL 311)	*Molto agitato*	*Molto agitato* M.M.♩ = 66–69	8/2	Am
V (VL 313)	*Tempestoso*	*Con brio* M.M.♩ = 82	3/4	Bm
VI (VL 309)	(I)	(I)	(I)	(I)

The scheme witnesses that the tempos marked by J. Čiurlionytė (JČKF) and V. Landsbergis (VLKF) only slightly differ (II: *Presto* or *Allegro risoluto*; *Con brio* or *Tempestoso*). The musicologists "contrived" these and other tempos of the works at their own discretion on the basis of the autonomy of each work, i.e. independence from the cyclic system. Considering every work as a potential movement of the cycle, a problem concerning proportions of the cycle arises and requires intentional motives for the counterbalance of the cycle. As we have noticed, the golden section proportion is particularly characteristic of separate parts of the cycle. It is therefore reasonable to think that the whole cycle should be also marked by an analogous golden section, because a proportional integrity of the cycle usually displays itself by way of a organic interrelation between the whole and part.

The structural analysis disclosed that the cycle's recapitulation coincides with the beginning of movement V. The emergence of recapitulations is usually linked with the principal proportions of the work, therefore, in case of the cycle in question it is logical to base oneself on this motive. A proportionality motive of the cycle makes possible to slightly make the tempos marked by the editors more exact in order to keep proper proportions of the cycle and reach a break of the cyclic form, i.e. the section of the golden proportion (GS).

Here we present one of the models showing possible tempos of the cycle's movements (Scheme No 10):

Scheme No 10

Movement of the cycle:	**I**	**II**	**III**	**IV**	**V**	**VI**
Number of measures:	19	13	26	27	42	(I)
Metres:	4/4	4/4	4/4	8/2	3/4	(I)
Total:	76	52	104	216	126	(I)
M.M.♩:	66	132	66	160	84	(I)
Duration time-value:	=1,151	=0,3963	=1,575	=1,350	=1,500	(=1,151)

The duration time-value of the whole cycle and the golden section: 7.120x6,18=4,400 (here 0,618 – coefficient of proportionality). The received value – 4,400 practically equals the duration time-value of the golden section coinciding with the recapitulation of the cycle – 4,469 (I+II+III+IV, i.e. 1,15+0,393+1,575+1,350).

The establishment of the optimal tempos of the movements opens a possibility to appreciate a proportional equilibrium between the two final movements (movement V is not marked by an independent golden section). Therefore, V (1,500) + VI (1,515) = 2,651x0,618 = 1,638. The received duration time-value is close enough to the culminating zone of the recapitulation, i.e. V, m. 40 (here one should also have in mind a possible slackened transition of last two measures to the final movement of the cycle).

The establishment of the proportions of the cycle enables one to intentionally cast a glance at possible values of other musical parameters. There is every reason to believe that the composer, leaving a great many other musical parameters without notational signs, synchronized the latter with the leading ones such as the harmonic-key plan and proportions. Incidentally, the proportions of the cycle also seem to be intentionally linked with the supposed incompletness of the movements of the cycle. It is witnessed by the golden sections of the latter.

The key and tempo plan of the cycle give a possibility to appreciate each of the movements on the most general scale in respect of their dynamics and even articulation. The rapid, impetuous tempos induce one to think about a synchronically displaying itself growth of the intensity of the work and compare it with its slow and less dinamically unfolded movements. The following reference scheme can prove useful here (Scheme No 11):

Scheme No 11

Movements of cycle:	I	II	III	IV	V	VI
Dynamics:	*p*	*f*	*p*	*f*	*f*	*p*

This generalizing scheme of dynamics is acceptable to intentionally initiate the basic strokes and characters of individual movements of the cycle. However, a detailed realization of the scheme depends on an individual discretion of the performers of the cycle.

Identification of the Cycle

An attempt to identify Čiurlionis' five works under investigation as an integral cycle necessitates to turn back to certain known cyclic form models. The analogies of the supposed cycle and its regularities with the known cycles of tonal music – classical complete sonata-form and romantic suite-form – can undoubtedly help to make the identity of the boundaries of the work more exact and define it.

One of the most significant criteria witnessing a cyclic character of tonal music – the key plan of the cycle's movements. The functional logic of the key plan usually structures the architecture of the entirety of the cycle.

It is noteworthy that the key plan of the movements seems to echo the most general regularities of the tonal composition and the cycle (Scheme No 12):

Scheme No 12

Movements of cycle:	I	II	III	IV	V	VI
Keys:	Dm	Am	Gm	Am	Bm	Dm
Division of cyclic form:	Eksposition		Development		Recapitulation	

Here we can see a dominant relationship between the keys traditional to expositions (particularly characteristic of the sonata-form), which is peculiar to movements I and II (d–a). The development separates itself from the exposition through a common subdominant key function (III:Gm), whereas the second half of the development clearly reminds of a dominant preixtus function (IV:a). Eventually, the keys of movements V and VI slightly modify a recapitulation stereotype of their integral key (V–VI: B-flat m-Dm). In this case, however, one finds easy to notice an additional function of a coda – the development related to movement V, which is marked by the augmented 6^{th} degree key (thus a subdominant in a wider sense) in respect of the basic one (i.e. Bm).

It is, therefore, self-evident that the scheme of the keys of the movements of the cycle articulate divisions of sonata-form by means of a rather typical relationship (on condition that it is carried out not on an integral but cyclic form scale). Thus, it follows that each functional sonata-form

section, for example, movement I echoes the principal theme, movement II – subordinate, movements III and IV — the development and its preixtus, and movement V and VI – recapitulation – coda.

The presented most general cyclic form scheme is also supported by its thematic – intonational outline, which has been pointed out earlier. Let us compare the cores of the initial thematic intonations of the largest divisions of the cycle (Scheme No 13):

Scheme No 13

Division of cyclic form:	Eksposition	Development	Recapitulation
Nucleus of intonation:	O (A-B-flat-f-e)	I (E-flat-D-G-A)	RI (G-A-flat-G-F-sharp)

It is evident that the two final movements of the cycle are not only inverse to the two initial ones in respect of their key relationships (I–II: T–D, V–VI: S–T) but also the thematic one (O and RI, exposition and recapitulation).

Another, no less significant, cyclic form criterion is the representation of one of the movements in sonata form. A conventional sonata form between the movements of the cycle cannot be noticed, but the two middle movements can be most likely perceived as a sonata-form subcycle. Its essense – a transfer of the sonata-form development episode to the next movement. In this way movement III would coincide with a abridged sonata form with the exposition and recapitulation, but without development. In its turn, the lack of the development is compensated by an independent movement IV. The abridged sonata form (III) of the subcycle is first of all substantiated by the distribution of the keys (Scheme No 14):

Scheme No 14

The III movement of cycle

Sonata-form sections:	Eksposition		Recapitulation	
Themes (principal, subordinate):	PT	ST	ST	PT
Keys:	Gm	C	G	Cm
Measures:	1	10	18	24

Here one can easily notice the so-called "mirror" recapitulation at least in respect of major and minor key relationships. However, the sonata form is also articulated by thematics. The melody of the principal theme is mostly marked by falling chromatic slides (m. 1–14), whereas the marginal top voice of subordinate theme is continuosly rising to the culmination by means of wide intervals. The melodies of both themes embrace (and even overstep) a two-octave range. In the second half of the subordinate theme (from m. 13) one can see a developmental passage usual on the exposition scale. Here the direction of the keys undergoing assimilation is typical of the principal theme (see falling sequential chains). The passage ends, as one could have hoped, in the climax in the dominant key (D minor, m. 17). The latter prepares a recapitulation.

The lacking section of the sonata-form development, as mentioned before, is compensated by movement IV. Differently from the ostinato formula of movement III, which expressed the intonation of the cycle I, now the ostinato expresses O, besides, in its two different shapes – in very widely seperated (B-C-sharp and D-C-sharp) and particularly compact (A-B and C-B, Ex. 1; IV O) seconds. It is an additional argument dividing the beginning of the cycle from its development not only in respect of the key (Gm and Am) but also themathic intonations (I and O).

It goes without saying that one can ask why the composer decided to segment sonata-form parts into a subcycle movements. Did he want to make the cycle compact and intensive? The synchronization of the development episode of the subcycle (coincides with IV) with the development phase of the entire cycle's system enabled him to avoid possible recurrences of functional divisions in favour of the whole of the cycle.

The idea of synchronic superposition of the divisions (mega-macro) seems to be more convincing having in mind the peculiarities of the realized recapitulation on the scale of the cycle. The second section of movement V seems to continue the previous development (IV). In consideration

that a minor is the culminating key of the development (IV, whereas the second section of this movement is in E minor), then the episode in D major section of movement V proves to be useful in respect of the key as an additional second development, because, as it is usually characteristic of codas, here the function of the subdominant key marks itself.

The following scheme illustrates how the development marks itself both on the scale of the cycle and the subcycle (Scheme No 15):

Scheme No 15

Development profill of cycle: Episodes and functions: Keys:	**Movement III** Phase 1 Gm	**Movement IV** sections I, II Phase 2 Am, Em	**Movement V** sections I Phase 3 D
Developmental profill of the subcycle and the functions of form: Keys:	**Movement III** Exposition and recapitulation Gm, G	**Movement IV** section I Development Am	

It follows that the composer besides employing sonata-form between the movements of the cycle also segmented it, composing a subcycle on a smaller scale.

The central position of the subcycle in the whole system of the cycle expresses the latter as a certain axis orienting to the pairs of marginal movements through concentric symmetry. In this way, the known regularity of the cyclic form is originally solved, when individual movements reflect the whole cycle, i.e. macro – is innerly based at a mega-level.

The carried out identifications make possible to state that Čiurlionis' works in question principally make up a musical cycle which has been not studied and noticed. Its whole structure can be briefly chracterized as follows: a concentrically oriented sonata-form structure whose individual functional divisions are represented by separate movements of the cycle. Besides, the representation of the cycle is materialized at two levels – as a sonata-form cycle (I–VI) and a sonata-form subcycle (III–IV)[4].

Conclusions

The main conclusion of the research is as follows: M. K. Čiurlionis' five works written in Druskininkai and Warsaw in 1907 (VL 309–313) form a spontaneous musical cycle untitled by the composer and unnoticed by musicologists. It is reasonable to call this multimovement work as an unrecognized cycle.

Probability features, witnessing the cyclic character of the works, manifest themselves by consequent dates of authographs and their positions in the manuscript book.

All the works belonging to the cycle are united by a two-directional intonation at seconds, displaying itself in different shapes (O, I, R, RI, M).

The sequence of the movements is regulated by the key plan and the ends of formally unfinished works.

The key plan of the cycle resounds the relationship of the inner keys of separate movements. The latter are particularly developed in the middle movements of the cycle (III–IV). Both movements are united and separated by the key chains of the relationships of the thirds. The inversion of the key chains cycles, the alternated directions of intervals and the transformation of modes, which displayed themselves in the mentioned movements of the cycle, turn them into central in respect of the concentric whole of the cycle.

Of supreme importance for the establishment of musical parameters – tempos, dynamiscs and articulation – unmarked by the composer are intentional proportions of the cycle. The establishment both of individual movements and the golden section of the whole cycle makes possible to motivate the alternation of the slow and rapid, the intensive and moderate movements of the cycle.

The key plan of the movements, which is close to sonata-form key relationships, is particularly important for the identification of the cyclic form. Due to the mentioned relationships, the

functions of the cyclic form become distinct: exposition (I–II), development (III–IV) and recapitulation (V–VI). These functions are also supported by a thematic-intonational outline of the cycle.

The sonata-form, resounding a cyclic form criteria, was used between the movements of the cycle, however, it was realized segmentally between two middle movements, forming a sonata-form subcycle at a lower level.

Hence, the cyclic form of the work is principally a concentrically oriented sonata form whose innner divisions are realized through individual movements of the cycle.

Abbreviations

JČKF – Čiurlionis M. K. *Kūriniai fortepijonui* (Works for piano, ed. by J. Čiurlionytė). Vilnius: Vaga, 1957.
VL – The list of M. K. Čiurlionis' works compiled by Vytautas Landsbergis (Landsbergis V., *Čiurlionio muzika*. Vilnius: Vaga, 1986, p. 223–296).
VLKF – Čiurlionis M. K. *Kūriniai fortepijonui. Visuma* (Compositions for piano. Completed). Kaunas, 2004.
DK – *M. K. Čiurlionis. Muzika. Katalogas* (Music. Catalogue, ed. by D. Kučinskas). Kaunas: Technologija, 2006.
KJŽ – Čiurlionytė-Karužienė V., Juodis S. E., Žukas V. *Mikalojus Konstantinas Čiurlionis. Bibliografija* (Bibliography). Vilnius: Vaga, 1970.
Čm – The list of M. K. Čiurlionis' authographs introduced in the State M. K. Čiurlionis Museum of Arts since 1990th.

References

[1] Landsbergis V. *Čiurlionio muzika*, Vilnius, 1986, p. 117; Kučinskas D. *M. K. Čiurlionio fortepijoninės muzikos tekstas (Genezės aspektas).* [The text of M. K. Čiurlionis' piano music (Genesis' aspect)] Abstract of Doct. Diss. Vilnius, 2002, p. 13, 21.
[2] DK, p. 8.
[3] See for more: Janeliauskas R. Unrecognized M. K. Čiurlionis' cycles for piano (1907 07, Druskininkai). Principles of Music Composing. Aspects of Historical Dispersion. IV. Vilnius, 2004.
[4] For the notes see: VLKF or JČKF.

Santrauka

M. K. Čiurlionio Neatpažintas ciklas (1907, Druskininkai–Varšuva)

Didžiajam lietuvių kompozitoriui M. K. Čiurlioniui būdingas ciklišas mąstymas – tai matome iš daugybės jo paveikslų ciklų. Tačiau palyginti gausioje fortepijoninėje kūryboje ciklišumo nuorodų nedaug. Į akis krinta kūrinių pavadinimų stoka, tariamas jų neišbaigtumas. Tokia kūrybos maniera – nepažymėti, neužbaigti kūrinių – labai primena spontanišką kūrybos būdą, tai atspindi ir jo kūrinių datų „pliūpsniai", „išmėtyti" autografai.

Šio tyrimo objektas – 5 kūriniai fortepijonui, sukurti 1907 m. vasarą ir rudenį Druskininkuose bei Varšuvoje (VL 309–313).

Susipažinus su rankraščio autografų išdėstymu, galima teigti, kad ciklo kūrinių seka negali būti pagrįsta kūrinių chronologija. Tačiau chronologinis tyrimas leidžia įžvelgti tam tikrą numanomo ciklo tikimybę. Visų pirma tai rodo paties kompozitoriaus atliktas kūrinių datavimas, apimantis net keturis iš penkių numanomo ciklo kūrinių. O rankraščių knyga padeda spręsti apie nedatuoto kūrinio (V) vietą ir jo galimą priklausymą ciklui.

Regis, pats akivaizdžiausias struktūrinis visų ciklo dalių bendrumas pasireiškia dvikrypte (kylančia ir krintančia) sekundų intonacija. Vieną sekundą nuo kitos gali skirti siauresnis arba platesnis intervalas (1 pvz.). Pirmojoje dalyje (I) šios intonacijos iš pradžių skamba vienu metu melodijoje ir bose (čia pažymimi jų pavidalai: originalas – O ir inversija – I). Vidurinėse ciklo dalyse (II ir III) panašios intonacijos taip pat pastebimos nuo pat pradžių melodijoje (II O) ir bose (III I). Kiek kitaip jos pasireiškia ketvirtojoje dalyje. Ten melodizuotas originalas skamba bose (IV:O), o penktojoje dalyje ši intonacija retrogradiniu pavidalu įausta į melodiją (V:R). Be to, rasime ir mišrų intonacijos pavidalą (M).

Ciklo dalių sekos kriterijus – tonacinis planas, kurio narių slinktį labiausiai motyvuoja tariamai neužbaigtų kūrinių (III–V) pabaigos. Pastarosioms būdinga vedamųjų arba pustoninių fenomenų trauka į būsimosios dalies toniką arba jos pirmąjį akordą. Remdamiesi tariamai neužbaigtų kūrinių traukos analogija, galime numanyti būtiną I dalies pakartojimą ciklo pabaigoje.

Taigi tonacinis planas pasižymi tam tikrais ciklišKumo požymiais. Pirmosios dvi dalys santykiauja alternatyviu tonikinės ir dominantinės tonacijų santykiu, būdingu sonatų ekspozicijoms. Kitos dvi dalys (III ir IV) pasižymi plėtros padalai būdingomis tonacijų funkcijomis. Kaip įprasta, plėtra prasideda subdominantės tonacija (tai atlieptų III dalies *g-moll*), o baigiasi dominantiniu preiktu (IV dalies *a-moll*). Reprizinė ciklo fazė (V–VI) modifikuoja dominantinį pirmųjų dviejų tonacijų santykį į subdominantinį.

Kaip rodo struktūrinė analizė, ciklo repriza sutampa su V dalies pradžia. Reprizų pasirodymas paprastai siejamas su principinėmis kūrinio proporcijomis, tad ir analizuojamo ciklo atveju logiška remtis šiuo motyvu.

Ciklo proporcijų nustatymas leidžia intencionaliai pažvelgti į galimas kitų muzikos parametrų reikšmes. Logiška manyti, kad kompozitorius, nepažymėdamas daugelio kitų muzikos parametrų, juos sinchronizavo su vedančiaisiais (harmoniniu-tonaciniu planu, proporcijomis). Beje, ciklo proporcijos, regis, taip pat intencionaliai susietos su ciklo dalių tariamu neužbaigtumu. Tai patvirtina pastarųjų „aukso pjūviai“.

Kitu nemažiau reikšmingu ciklinės formos kriterijumi pripažįstamas vienos iš ciklo dalių reprezentavimas sonatos forma. Įprastos sonatos formos ciklo dalyse nematome, tačiau dvi vidurinės ciklo dalys gali būti suvokiamos kaip sonatos formos subciklas. Jo esmę sudaro sonatos formos plėtros epizodo nukėlimas į tolesnę dalį. Tokiu būdu III ciklo dalis sutaptų su sutrumpinta sonatos forma (tik su ekspozicija ir repriza), tačiau be plėtros. O plėtros epizodo stoka kompensuojama savarankiška IV dalimi. Subciklo sutrumpintą sonatos formą (III) pirmiausia pagrindžia tonacijų išsidėstymas.

Išeitų, kad kompozitorius ne tik panaudojo tarp ciklo dalių sonatos formą, bet ją susegmentavo, sudarydamas mažesnio lygmens subciklą.

Centrinė subciklo padėtis viso ciklo sistemoje įprasmina pastarąjį kaip tam tikrą ašį, koncentrinės simetrijos būdu orientuojančią į kraštinių dalių poras. Tokiu būdu savitai išsprendžiamas žinomas ciklinės formos dėsningumas, kai atskiros dalys atspindi visą ciklą, t. y. megalygmeniu pagrindžiamas makrolygmuo.

Pagrindinė tyrimo išvada: penki M. K. Čiurlionio kūriniai fortepijonui, sukurti 1907 m. Druskininkuose ir Varšuvoje (VL 309–313), yra kompozitoriaus neįvardytas ir muzikologų nepastebėtas spontaniškas muzikos ciklas. Šį daugiadalį kūrinį tiktų vadinti Neatpažintu ciklu.

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