

McGregor, Richard ORCID: <https://orcid.org/0000-0001-6685-2589> (2011) 'Active Agony' within Wolfgang Rihm's Tutuguri and the 4th String Quartet. In: EuroMac VII European Music Analysis Conference, 29 September - 2 October 2011, Rome, Italy. (Unpublished)

Downloaded from: <http://insight.cumbria.ac.uk/id/eprint/3560/>

***Usage of any items from the University of Cumbria's institutional repository 'Insight' must conform to the following fair usage guidelines.***

Any item and its associated metadata held in the University of Cumbria's institutional repository Insight (unless stated otherwise on the metadata record) may be copied, displayed or performed, and stored in line with the JISC fair dealing guidelines (available [here](#)) for educational and not-for-profit activities

**provided that**

- the authors, title and full bibliographic details of the item are cited clearly when any part of the work is referred to verbally or in the written form
  - a hyperlink/URL to the original Insight record of that item is included in any citations of the work
- the content is not changed in any way
- all files required for usage of the item are kept together with the main item file.

**You may not**

- sell any part of an item
- refer to any part of an item without citation
- amend any item or contextualise it in a way that will impugn the creator's reputation
- remove or alter the copyright statement on an item.

The full policy can be found [here](#).

Alternatively contact the University of Cumbria Repository Editor by emailing [insight@cumbria.ac.uk](mailto:insight@cumbria.ac.uk).

*The 7<sup>th</sup> European Music Analysis Conference (EuroMac VII) continues the series of European meetings inaugurated in Colmar (France) in 1989; other conferences followed in Trento (Italy), Montpellier (France), Rotterdam (Holland), Bristol (UK), and Freiburg (Germany).*

*EuroMac VII is organized by the Gruppo Analisi e Teoria Musicale (G.A.T.M.) and the Dipartimento di Beni Culturali, Musica e Spettacolo (BEMUS) Università di Roma Tor Vergata, with the cooperation of SFAM (Société Française d'Analyse Musicale), SBAM (Société Belge d'Analyse Musicale), VvM (Vereniging voor Muziektheorie), SMA (Society for Music Analysis), GMTH (Gesellschaft für Musik Theorie).*

*EuroMac VII will be the inaugural event of the new Federation of European Music Analysis Societies: the meeting venue, in the historical Conservatorio di Musica "Santa Cecilia" (Rome), stresses the importance of this conference as a pivotal moment of the discipline in European countries.*



Programme and Abstracts Book

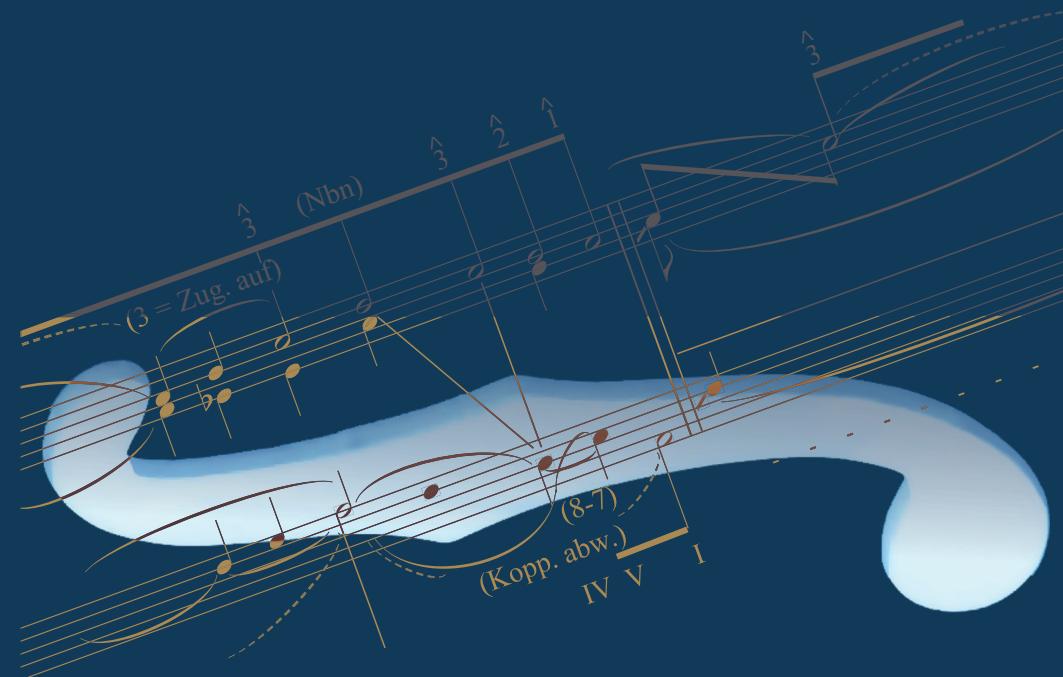
EUROMAC VII EUROPEAN MUSIC ANALYSIS CONFERENCE



# EUROMAC

## VII EUROPEAN MUSIC ANALYSIS CONFERENCE

Conservatorio di Musica "S. Cecilia"  
Rome, 29 September – 2 October, 2011



### ***Programme and Abstracts Book***

# EUROMAC

VII EUROPEAN MUSIC ANALYSIS CONFERENCE

Conservatorio di Musica “S. Cecilia”  
Rome, 29 September - 2 October, 2011

## *Programme and Abstracts Book*

Gruppo Analisi e Teoria Musicale  
Dipartimento di Beni Culturali, Musica e Spettacolo  
Università di Roma Tor Vergata

**EuroMac**  
**VII European Music Analysis Conference**  
**Rome, 29 September – 2 October, 2011**

**Scientific Committee** Giorgio Sanguinetti (G.A.T.M., President of the Scientific Committee),  
Jean-Michel Bardez (SFAM), Mario Baroni (G.A.T.M.), Pieter Bergé (VvM), Rossana Dalmonte (G.A.T.M.),  
Johannes Menke (GMTH), Michael Spitzer (SMA), Laurence Wuidar (SBAM).



**Organizing Committee** Mario Baroni, Antonio Cascelli, Luisa Curinga, Rossana Dalmonte,  
Catello Gallotti, Piero Gargiulo, Ignazio Macchiarella, Susanna Pasticci, Egidio Pozzi, Antonio Rostagno,  
Guido Salvetti, Giorgio Sanguinetti, Gaetano Stella, Johannella Tafuri.

**Advisory Board** Jean-Michel Bardez, Mario Baroni, Bruno Bossis, Antonio Cascelli, Luisa Curinga,  
Rossana Dalmonte, Jean-Pierre Deleuze, Felix Diergarten, Nicolas Donin, Jean-Luc Fafchamps,  
Catello Gallotti, Piero Gargiulo, Gilles Gobert, Ludwig Holtmeier, Ulrich Kaiser, Pierre Kolp,  
Ignazio Macchiarella, Marie-Noëlle Masson, Claude Ledoux, Nicolas Meeùs, Johannes Menke,  
Susanna Pasticci, Egidio Pozzi, Jean-Marie Rens, Nicholas Reyland, Stefan Rohringer, Antonio Rostagno,  
Oliver Schwab-Felisch, Guido Salvetti, Giorgio Sanguinetti, Michael Spitzer, Gaetano Stella,  
Johannella Tafuri, Renee Timmers, Edward Venn.

**Editorial Board** Egidio Pozzi (chair), Mario Baroni, Antonio Cascelli, Rossana Dalmonte,  
Catello Gallotti, Ignazio Macchiarella, Antonio Rostagno.

**Secretariat of EuroMac 2011** Stefano Quaresima, Chiara Stefanucci.

The Conference has been realised with the collaboration of the Dipartimento di Beni Culturali,  
Musica e Spettacolo Università di Roma Tor Vergata and the support of Provincia di Roma,  
Conservatorio di Musica "Santa Cecilia" di Roma, Fondazione Istituto Liszt.



Conservatorio di Musica  
"S. Cecilia" di Roma



Istituto Liszt  
Fondazione  
Istituto Liszt

**Programme and Abstracts Book**  
Edited by Antonio Cascelli and Egidio Pozzi  
Back cover: *Sala Accademica of Conservatorio "Santa Cecilia", Rome* (photo by Massimo Costa)  
Copyright © 2011 G.A.T.M. Gruppo Analisi e Teoria Musicale, Bologna

Editorial project by Iter Edizioni srl  
Via dei Tufelli 1, 00028 Subiaco (Roma)  
www.iteredizioni.it

Printed in Italy by Poligraf, Pomezia (Rome) - September 2011

## Contents

A WORD OF WELCOME ..... Page 5

PROGRAMME ..... » 6

### ABSTRACTS

Panels and Sessions ..... » 21  
Posters and Workshops ..... » 219  
Plenary session ..... » 230

INDEX OF PARTICIPANTS ..... » 234

## A word of welcome

**E**xactly 20 years ago (Oct. 24-27, 1991) the G.A.T.M. and the University of Trento organised the Second European Conference of Music Analysis, following the first conference of this kind held in Colmar (France) in 1989.

In the subsequent twenty years five different European societies continued the tradition, organising in their countries other conferences of the series. In doing so, the relationships and the exchanges between different national traditions and cultures became more and more frequent and intense, even at personal level. After so many years of common experience, we are now in the position to have a retrospective global vision of the many facets of music analysis in Europe.

Frequent meetings, strong personal relationships and fruitful scientific exchanges have not been sufficient to obtain a real coherence among the different European analytic traditions. The situation of our discipline reflects the general condition of Europe: different national entities co-operate for several aspects, while for others they seem reluctant to abandon their individual habits.

Perhaps a great work is still needed to build a common European presence in the field of music theory and analysis. However, it would be difficult to underestimate the impressive growth of music analysis in Europe in the recent years, as well as the interest that it raises on the other side of the Atlantic.

The EuroMac VII has been planned with this situation in mind. The organization of the Conference has been prepared by two meetings with the delegates of the six European societies. In these occasions a proposal has been discussed and unanimously accepted: to conclude the conference with a general meeting whose purpose is to give birth to a Federation of the European societies.

We expect that the VII Conference will produce good scientific results: the quantity of the participants, the quality of the abstracts and the variety of the interests are excellent premises for its success. In the 22 years after Colmar, the cultural perspectives have obviously changed: many of the leading ideas and hopes at the end of the Eighties are no more the same. Aware of this, we invited a group of colleagues to share – at the end of the conference – their ideas on the present situation and on the future of our discipline.

As organizers of the Conference, we are extremely glad to host the participants in the EuroMac VII in the magnificent and inspiring setting of the Conservatorio "Santa Cecilia" in Rome. We would like to express our sincere gratitude to the Director and the Academic Council of the Conservatory for their hospitality, and to the Provincia di Roma for the generous support. We wish our hosts a pleasant stay in Rome, and hope that the new Federation will further inspire the growth of music analysis in Europe.

*See you at the next EuroMac VIII!*

MARIO BARONI  
GIORGIO SANGUINETTI

# EuroMac 2011 Programme

Conservatorio di Musica "S. Cecilia", Rome

## Thursday morning, 29 september

- 9,00 Registration
- 10,00 Inauguration and welcome speeches
- 11,00 Joint session: *The European music analysis societies and their perspectives*
- 12,30 Welcome Lunch

## Thursday afternoon

	SALA ACCADEMICA	BIBLIOTECA	SALA DEI MEDAGLIONI
	Analysis and History (I) Chair: Guido Salvetti	Italian Opera Chair: Giorgio Sanguinetti	20 <sup>th</sup> Century Music (I) Chair: Luisa Curinga
14.30	Bella Brover-Lubovsky (IL) <i>Concepts of modal dualism in practice and in theory in eighteenth-century Northern Italy</i>	Nicholas Baragwanath (GB) <i>Methods and formulas for composing opera in nineteenth-century Italy</i>	Federico Lazzaro (IT) II "rinnovamento espressivo" nelle Cinq Dansees Rituelles di André Jolivet
15.00	Anne M. Hyland (GB) <i>Tautology or teleology? An analysis of Harold Bauer's 1918 and 1942 editions of Schubert's Piano Sonata in B<sub>b</sub> major, D 960</i>	Deborah Burton (US) <i>Ariadne's threads: Puccini and cinema</i>	Emanuele Ferrari (IT) <i>Rota's 15 Preludes for piano: notes on composition and style</i>
15.30	Angelika Moths (CH) <i>Fragmenta ex mottett: Die Herdringer Handschriften - ein wichtige Quelle zur Analyse der Musik vor 1600</i>	Maria Birbili (DE) <i>Self-reflective dramaturgy in Rossini's opere buffe</i>	Norton Dudeque (BR) <i>Musical gestures and texture in the first movement of Villa-Lobos's String Trio (1945)</i>
16.00	Christoph Prendl (AT) <i>Das erste Oratorium der Musikgeschichte: Antike Modi oder erweiterte Mitteltönigkeit?</i>	Marco Targa (IT) <i>Forme melodiche nell'opera della Giovane Scuola</i>	Germán Gan-Quesada (ES) <i>Rising to the occasion... avant-gardist trends in Spanish orchestral music (1955-1975)</i>
16.30	<b>COFFEE BREAK</b>		

	Oral Traditions (I) Chair: Giorgio Adamo	Repertoires and Methods Chair: Jean-Michel Bardez	Special Session Scelsi Chair: Susanna Pasticci
17.00	Joseph Lubben (US) <i>Analyzing Venezuela's folk-baroque fusion music</i>	Ludwig Holtmeier (DE) <i>Rameau's long shadow. Thoughts on the music-theoretical canon of the 18<sup>th</sup> century</i>	Alessandra Carlotta Pellegrini (IT) <i>Oralità e scrittura nella musica vocale di Giacinto Scelsi</i>
17.30	Innocenzo De Gaudio (IT) <i>La ricchezza di formule e sequenze melodiche stereotipe nel sistema musicale arbëresh</i>	Markus Roth (DE) <i>Bearbeitung als Medium der Analyse?</i>	Ian Dickson (GB) <i>Sound "versus" syntax: the example of Scelsi</i>
18.00	Violaine De Larminat (AT) <i>Werk- und Höranalyse: Rivalität oder Partnerschaft?</i>	Marie-Noëlle Masson (FR) <i>Musique et langage: prolégomènes à l'étude comparée de leur articulation dans la musique vocale</i>	Ivan Elezovic (US) <i>Scelsi's approach to the "third dimension" in Quattro pezzi (su una nota sola)</i>
18.30		Dulio D'Alfonso (IT) <i>Una riflessione sul rapporto tra analisi e percezione musicale</i>	Sandro Marrocù (IT) <i>Ondioline, nastri, Revox e tecniche di notazione nella musica di Giacinto Scelsi</i>
19.00	<b>SALA ACCADEMICA, CONCERT</b>		

	GYMNASIUM	AULA RESPIGHI	AULA 16
	Popular music Chair: Roberto Giuliani	Post-Tonal Form Chair: Edward Venn	Workshop
14.30	Nicole Biamonte (CA) <i>Formal strategies of metric dissonance in rock music</i>	Candida Felici (IT) <i>Captazione e memoria come mezzi d'articolazione formale nell'opera di Luciano Berio</i>	Manfred Stahnke (DE) <i>Ligeti: patterns and destruction of patterns</i>
15.00	Enrico Bianchi, Marie Bernadette Sabatelli (IT) <i>Il "corpo" vocale della popular music</i>	Gerhard Lock, Kerri Kotta (EE) <i>Perceiving, conceptualising and measuring musical form and tension of contemporary symphonic music by Erkki-Sven Tüür: a preliminary study</i>	
15.30	Alessandro Bratus (IT) <i>Too much of nothing, or the space between the two: popular music and composition in Bob Dylan's Basement Tapes</i>	Kerri Kotta (EE) <i>Form and voice-leading in Shostakovich's Second Symphony</i>	
16.00	Francesco Stumpo (IT) <i>Analisi della popular music: il "missaggio filmico" di Tiziano Ferro</i>		
	Wagner and Wagnerism Chair: Jan Philipp Sprick	20 <sup>th</sup> Century Harmony Chair: Sigrun B. Heinzelmann	Panel
17.00	Hans-Ulrich Fuß (DE) <i>Zwischen Musikalischer Prosa und sequenzieller Regelmäßigkeit: Zur Großrhythmisierung in Wagners Musikdramen</i>	Vincent P. Benitez (US) <i>Harmony and transformational voice-leading in the later music of Olivier Messiaen</i>	Dialogic analysis Ignazio Macchiarella (IT), chair
17.30	Marie-Hélène Benoit-Otis (CA) <i>Dramaturgie et wagnérisme dans Le Roi Arthur d'Ernest Chausson</i>	Henri Gonnard (FR) <i>La persistance de la tonalité au XX<sup>e</sup> siècle</i>	Marco Lutzu (IT) <i>Understanding (thanks to) the relations. An analysis of the Oro Seco with musicians</i> Paolo Bravi (IT) <i>Boxis froria. A emic/etic analysis of vibrato in singing voices of traditional oral music of Sardinia</i>
18.00	Susan K. de Ghizé (USA) <i>Isolde's multiple orgasms: sexology and Wagner's Transfiguration</i>	Yi-Cheng Wu (US) <i>Harmonic analysis in Ruth Crawford's String Quartet: examining contemporary issues based on a modern compositional approach</i>	Massimo Rizzo (IT) <i>Modeling sopila musical interactions: from a pitch-oriented music analysis to a relational model</i>
18.30	Wolfram Boden (DE) <i>Analyzing social structures in opera: the use of "Leitmotiv" and other dramaturgical techniques in the operas of Louis Spohr</i>	Hans Peter Reutter (DE) <i>Brave Neo Classic Revisited. Some analytical aspects of scalar harmony in Igor Stravinsky's middle period [abstract not received]</i>	

## Friday morning, 30 September

	SALA ACCADEMICA	BIBLIOTECA	SALA DEI MEDAGLIONI
	Liszt: New Perspectives (II) Chair: Rossana Dalmonte	Analysis and History (II) Chair: Ludwig Holtmeier	Special Session Scelsi (cont.) Chair: Nicola Sani
9.00	Rossana Dalmonte (IT) <i>Introduzione alle sessioni lisziane</i>  Serge Gut (FR) <i>L'adaptation de la forme sonate beethovenienne dans certaines œuvres du Liszt de la maturité</i>	Hans Aerts (DE) <i>Quellen zur Kontrapunktlehre Leonardo Leos: Zur Musiktheorie in Neapel in der ersten Hälfte des 18. Jahrhunderts</i>  Paolo Sullo (IT) <i>I solfeggi autografi di Nicola Zingarelli nella biblioteca San Pietro a Majella di Napoli</i>	Susanna Pasticci (IT) <i>Improvvisare, comporre, fare musica: i Divertimenti per violino di Giacinto Scelsi</i>  Angela Carone (IT) <i>Scelsi e la "rivoluzione comportamentale": il rapporto tra improvvisazione e composizione nell'ottica della filologia musicale (con esempi da Hymnos)</i>
10.00	Michael Saffle (US) <i>Liszt's Symphonic Poems: past analyses and an introduction to meta-analytical issues</i>	Felix Diergarten (DE) <i>(Re-)making the cadence dissonant. Remarks on the partitura tradition</i>	Emanuele Del Verme (IT) <i>Scelsi e l'Oriente: l'alto compositivo come "veicolo" escatologico</i>
10.30	COFFEE BREAK		
	Liszt: New Perspectives (II) Chair: Laurence Le Diagon-Jacquin	Schenker Chair: Deborah Burton	Schemata Theories Chair: Johannes Menke
11.00	Frank Heidlberger (US) <i>"Une nouvelle énormité fantastique": Franz Liszt's Grande Fantaisie symphonique on themes from Berlioz' Lélio as an experiment in symphonic form</i>	Egidio Pozzi (IT) <i>Beyond the "tyranny" of the Urlinie. Enger Satz and prolongations in the first movement of Franz Joseph Haydn's Quartet op. 33 n. 1"</i>	Claudia J. Scroccaro (IT) <i>Le fughe per tastiera di Domenico Scarlatti</i>
11.30	Jin-Ah Kim (DE) <i>Zyklische Sonatenformkonzeption in Liszts Symphonischen Dichtungen</i>	Luciane Beduschi, Nicolas Meeùs (FR) <i>Vues nouvelles sur la pédagogie de l'analyse schenkerienne: Schumann's Träumerei, op. 15 n. 7</i>	Gaetano Stella (IT) <i>The use of "Galant Schemata" in the Napolitan didactic of counterpoint: the Regole del contrappunto pratico of Nicola Sala</i>
12.00	Mariateresa Storino (IT) <i>Liszt and the piano concerto form: Structural novelty and tradition in the Concerto n. 2 in A major</i>	Antonio Cascelli (IE) <i>Schenkerian Ursatz and temporal meaning in Chopin's Prelude op. 28, n. 5</i>	Juliane Brandes (DE) <i>Fußnote zu einem "Essay über verschiedene Schemata in der Musik des galanten Stils"</i>
12.30	Costas Tsougras (GR) <i>Chromatic third relations, symmetrical octave division and paths in pitch space: theoretical and analytical study of the harmonic structure of Franz Liszt's II Pensero</i>	Hiroko Nishida (JP) <i>Heinrich Schenker's verbal associative narrative and Urlinie narrative</i>	Mario Marques Trilha (PT) <i>Il Partimento settecentesco in Portogallo</i>
13.00	SALA ACCADEMICA, CONCERT		

	GYMNASIUM	AULA RESPIGHI	AULA 16
	20 <sup>th</sup> Century Music (II) Chair: Nicola Verzina	Syntax and Meter Chair: Catello Gallotti	Workshop
9.00	Sigrun B. Heinzelmann (US) <i>Ravel's motivic transformations</i>	Roger Mathew Grant (US) <i>Ordnung, Rhythmus, Takt: eighteenth-century musical temporalities</i>	Anne Smith (CH)  <i>16<sup>th</sup> century solmization in practice: What use does it have in the 21<sup>st</sup> century?</i>
9.30	Nathalie Ruget (FR) <i>Musique populaire et articulations verbales dans Le château de Barbe Bleue et les Six quatuors à cordes de Béla Bartók: une analyse au crible de la langue</i>	Martin Küster (DE) <i>Putting measures back on their feet: prosodic meter beyond Marpurg</i>	
10.00	Sarah J. Reichardt (US) <i>Sonata rhetoric and the hermeneutic implications in Dmitri Shostakovich's String Quartets</i>	Steven Jan (GB) <i>A memetic analysis of a phrase by Beethoven: Calvinian perspectives on segmentation, similarity and lexicon-abstraction</i>	
	Temporality Chair: Michel Imberty	Hermeneutics Chair: Michael Spitzer	Film Music Chair: Maurizio Gabrieli
11.00	Ève Poudrier (US) <i>Multiple temporalities: speeds, beat cues, and beat tracking in Carter's instrumental music</i>	Ildar D. Khannanov (US) <i>Thematism and form in op. 90 and op. 110: nostalgia for early Italian music in late Beethoven's piano sonatas</i>	Kevin Clifton (US) <i>Unraveling music in Alfred Hitchcock's Rope</i>
11.30	Andrew Davis, Corey Tu (US) <i>Signifying temporality in Brahms's F# minor Piano Sonata</i>	Cosima Linke (DE) <i>Eine rätselhafte Konstellation in Beethovens cis-Moll-Fuge op. 131, I</i>	Olivier Pigott (FR) <i>Mahler: une préfiguration de la narration cinématographique</i>
12.00		Hubert Moßburger (DE) <i>Res oder "Verba"? Zum historischen Ursprung der Kontroversen über das Wort-Ton-Verhältnis und seinen analytisch-hermeneutischen Konsequenzen</i>	Paolo Teodori (IT) <i>Tonalità e non tonalità nella musica per il cinema; usi in relazione a contesti ed emozioni</i>
12.30		Reiko Fütig (DE) <i>Composer, poet, or priest? The ending of Schumann's Kinderszenen</i>	Robert Rabenalt (DE) <i>Music and emotion – a music-dramaturgical study of "affect-formation" in C'era una volta il West</i>

## Friday afternoon, 30 September

	SALA ACCADEMICA	BIBLIOTECA	SALA DEI MEDAGLIONI
	Analysis and Performance (I) Chair: Gaetano Stella	History of Tonal Theory Chair: Markus Roth	Classical Form Chair: Giorgio Sanguineti
15.00	Mario Baroni, Anna Maria Bordin, Michela Sacco (IT) <i>From sign to sound: Analysis of notation with a view to performance</i>	Mart Humal (EE) <i>Contrapuntal analysis and the history of music theory</i>	Catello Gallotti (IT) <i>The exposition of the first movement of Beethoven's Eb major Piano Sonata, op. 7, between formal functions and Sonata Theory</i>
15.30	Luca Bruno (IT) <i>Music analysis and performance: creating an interpretation of Igor Stravinsky's Piano Sonata (1924), first movement</i>	Nathalie Meidhof (DE) <i>Zwischen Dissonanz, Dissonanz und dissonance. Alexandre Étienne Chorons (1771-1834) "europäischer" Akkordbegriff</i>	Wayne C. Petty (US) <i>"A plan corresponding to the peculiarity of the subject": Czerny's advice on the development section and its application to Haydn</i>
16.00	Luisa Curinga (IT) <i>Breathing, interpretation and analysis in the Allemande from the J. S. Bach's Partita BWV 1030 for solo flute</i>	Torsten Mario Augenstein (DE) <i>Falsobordone-settings and vertical-thinking in music – studies on the technique of the 15<sup>th</sup>-18<sup>th</sup> century falsobordone-practice and its influence on harmonic setting</i>	Patrick Wood Uribe (US) <i>Formenlehre as aesthetic education</i>
16.30	<b>COFFEE BREAK</b>		
	SALA ACCADEMICA	BIBLIOTECA	SALA DEI MEDAGLIONI
	Music and Emotion Chair: Mario Baroni	Baroque Music Chair: Felix Diergarten	Liszt: New Perspectives (IV) Chair: Bruno Moysan
17.00	Melissa Hoag (US) <i>Drama and disruption in a Brahms Capriccio</i>	David Mesquita (CH) <i>Pere Rabassa's Guía para los principiantes und die spanische Musik im frühen 18.Jahrhundert</i>	Rossana Dalmonte (IT) <i>Franz Liszt's Funérailles among classical forms</i>
17.30	Michael Spitzer (GB) <i>Analysing fear in Schubert</i>	Domenico Morgante (IT) <i>La teatralità del linguaggio tastieristico frescobaldiano</i>	Alfonso Alberti (IT) <i>Per un'indagine capiliana delle funzioni intramatiche nella produzione matura di Franz Liszt</i>
18.00	Carlo Bianchi (IT) <i>Ferruccio Busoni e le emozioni di una rivisitazione bachiana. La Fantasia "in memoria di mio padre Ferdinando"</i>	Johannes Menke (DE) <i>Analyzing Carissimi</i>	Grace Yu (HK) <i>Interpreting sonata form in context: Liszt's "Dante Sonata" (1858)</i>
18.30	Volker Helbing (DE) <i>Über-Komplexität und Emotion – zur Frühfassung des ersten Satzes von Ligeti's Violinkonzert [abstract not received]</i>	Marja Saarela (FI) <i>Example of tonal allegory in Cavalli</i>	Panu Heimonen (FI) <i>Sonata form deformations in Franz Liszt's piano piece Invocation</i>
19.00	<b>SALA ACCADEMICA, CONCERT</b>		

	GYMNASIUM	AULA MUSICA ELETTRONICA	AULA 16
	Liszt: New Perspectives (III) Chair: Michael Saffle	Electroacoustic Music Chair: Giorgio Nottoli	Panel
15.00	Laurence Le Diagon-Jacquin (FR) <i>Source opératoire strophique wagnérienne et adaptation pianistique lisztienne: l'exemple du Spinnerlied et de la Ballade de Senta extraits du Vaisseau fantôme</i>	Sandrine Lopez-Ferrer (FR) <i>L'analyse de l'espace dans les œuvres électroacoustiques multiphoniques</i>	Analysis, historiography, and the construction of meaning
15.30	Giuliano Danieli, Alexandros Hatzikirakos (IT) <i>Liszt e la musica russa</i>	Dack John (GB) <i>Issues in the analysis of Scambi – an "open" electro-acoustic composition</i>	Mark Delaere (BE), chair K. Boucquet (BE) <i>Analyzing history, historicizing analysis. A meta-methodological approach</i> D. Burn, G. McDonald (BE) <i>Canons and crosses: Leonhard Paminer's Vexilla regis prodeunt and Tua cruce triumphamus</i> M. Neuwirth, P. Bergé (BE) <i>Fuggir la cadenza, or The art of avoiding cadential closure. Contemporaneous vs. modern theoretical perspectives on the analysis of "deceptive cadences" in the classical repertoire</i> K. Coulembier (BE) <i>How much theory does music analysis need? The case of Claus-Steffen Mahnkopf</i>
16.00	Luigi Verdi (IT) <i>La musica di Franz Liszt nel cinema</i>	Renaud Meric (FR) <i>Le faire et l'écouter: réflexion sur l'analyse des musiques informatiques. Autour de Gymel de Horacio Vaggione</i>	
	GYMNASIUM	SALA RESPIGHI	AULA 16
	Opera in France and Britain Chair: Nicholas Baragwanath	Late 20 <sup>th</sup> Century Music Chair: Alessandro Sbordoni	Workshop
17.00	Raphaëlle Legrand (FR) <i>Baroque architectures: Jean-Philippe Rameau and the musico-dramatic structures of French opera</i>	Bianca Tiplea Temes (RO) <i>Métamorphoses nocturnes, turning point in Ligeti's musical texture concept</i>	Emanuele Ferrari (IT) Paolo Bravi (IT) Réminiscences de Don Juan by Liszt: dramatic re-write and communication strategies. Doing musicological research with Praat
17.30	Caroline Waight (US) <i>"A great French victory": guilt and glory in Francis Poulenc's Dialogues of the Carmelites</i>	Claudio Horacio Vitalé (BR) <i>Processus graduels dans quelques œuvres des années soixante et septante de György Ligeti</i>	
18.00	Richard Hermann (US) <i>Boundaries transgressed: text setting in Dido's Lament</i>	Gerardo Scheige (DE) <i>Klänge des Verstummens. Zur Konstruktion des Todes in der Musik György Ligeti</i>	
18.30	Edward Venn (GB) <i>Musical gesture and dramatic trajectories: the case of Michael Tippett's The Knot Garden</i>	Fabio De Sanctis De Benedictis (IT) <i>Figura, processo e articolazione parametrica in Lumen di Franco Donatoni</i>	Poster
18.45			Elisabetta Piras (IT) <i>Interpretative choices and analysis in young pianists' performances</i> Simonetta Sargent (IT) <i>Gesture and sound analysis: virtual instruments and interactive composition</i>

## Saturday morning, 1 October

	<b>SALA ACCADEMICA</b>	<b>BIBLIOTECA</b>	<b>SALA DEI MEDAGLIONI</b>
	<b>Opera and Stage</b> Chair: Antonio Rostagno	<b>Medieval and Renaissance Music</b> Chair: Agostino Ziino	<b>Aspects of Tonal Theory</b> Chair: Wayne Petty
9.00	<b>Su-yin Mak, Lufan Xu (HK)</b> Musical analysis as stage direction? A reappraisal of the relationship between analysis and operatic staging	<b>Wendelin Bitzan (DE)</b> Never-ending canon. Pedagogic approaches to two-partes canonical passages from Josquin's masses	<b>Danuta Mirka (GB)</b> The mystery of the cadential six-four
9.30	<b>Marco Stacca (IT)</b> Forme della musica e categorie della regia nel Barbiere di Siviglia secondo Dario Fo	<b>Marco Mangani, Daniele Sabaino (IT)</b> L'organizzazione dello spazio sonoro nella polifonia dell'Ars Nova Italiana. Prime osservazioni	<b>Andreas Moraitis (DE)</b> Statistical correlates of basic tonal relationships
10.00	<b>Daniele Daude (DE)</b> Gesten – Knoten – Korrespondenz	<b>Paola Ronchetti (IT)</b> Alba cruda, alba ria. Un madrigale di Giovanni Battista Strozzi attraverso le intonazioni della seconda metà del '500	<b>Uri Rom (DE)</b> Structural deformation as a token of undercurrent humor in Mozart's instrumental rondos
10.30	<b>COFFEE BREAK</b>		
	<b>SALA ACCADEMICA</b>	<b>BIBLIOTECA</b>	<b>SALA DEI MEDAGLIONI</b>
	<b>Oral Traditions (II)</b> Chair: Serena Facci	<b>Psychoanalytical Issues</b> Chair: Roberto Caterina	<b>Serialism and Atonality</b> Chair: Norton Dudeque
11.00	<b>Dieter A. Nanz (CH)</b> Between orality and notation. Towards an analysis of Classical Japanese music for Shakuhachi	<b>Miloš Zatklik, Aleksandar Kontić (RS)</b> Orpheus and Eurydice reunited: towards a psychoanalytic understanding of "musical affects"	<b>Stefanie Acevedo (US)</b> Segmentational approaches of atonal music: a study based on a general theory of segmentation for music analysis
11.30	<b>David Clarke (GB)</b> Conditions of possibility? Ethical and methodological issues in the analysis of North Indian classical music	<b>Audrey Lavest-Bonnard (FR)</b> Etude du langage schönbergien: un exemple de psychanalyse appliquée	<b>Johannes Söllner (DE)</b> Zwölfton-Improvisation – Zum improvisatorischen Potential der Dodekaphonie mit Hilfe von hexachordal combinatoriality
12.00	<b>Annie Labussière (FR)</b> Il gesto vocale come strumento per la valutazione di una struttura profonda all'interno del canto tradizionale In naked voice		<b>Carlos Duque (ES)</b> System, order and creation in the 4 <sup>th</sup> Symphony of Roberto Gerhard: dynamic condition of chaos
12.30			<b>Walter Kreyszig (CA)</b> Schönbergs Lehre vom Zusammenhang und ihre Auswirkung auf die "Faßlichkeit" seiner Methode der Komposition mit zwölf nur aufeinanderbezogenen Tönen
13.00	<b>SALA ACCADEMICA, CONCERT</b>		

	<b>GYMNASIUM</b>	<b>AULA MUSICA ELETTRONICA</b>	<b>AULA 16</b>
	<b>Romantic Form</b> Chair: Antonio Caselli	<b>Workshop</b>	<b>Panel</b>
9.00	<b>Shigeru Fujita (JP)</b> De Chopin à Liszt: l'évolution du principe architectonique dans leurs Ballades	<b>Giovanni Cappiello (IT)</b>	<i>The induction of emotion in music: three case studies</i>
9.30	<b>Konstantin Zenkin (RU)</b> The mobility of structures in the works of Franz Liszt. From the romantic form-process to "open" form		<b>Chelsey Hamm (US), chair</b> Towards emotional meaning in Ives's Orchestral Set No. 2, III <b>Juan A. Mesa (US)</b> Hearing emotion in J.S. Bach's O Mensch, bewein dein Sünde groß BWV 622 <b>Katrina Roush (US)</b> Strong emotions, agency, and the role of "music alone": two arias from Puccini's Turandot
10.00	<b>Lauri Suurpää (FI)</b> The fourth piece of Schumann's Kreisleriana, op. 16, as a musical fragment: discontinuity and unity intertwined		
	<b>GYMNASIUM</b>	<b>AULA RESPIGHI</b>	<b>AULA 16</b>
	<b>Debussy</b> Chair: Guido Salvetti	<b>Music and Infancy</b> Chair: Franca Ferrari	<b>Workshop</b>
11.00	<b>Matthew Brown, John Koslosky (US/NL)</b> History and tonal coherence in Debussy's La fille aux cheveux de lin and Bruyères	<b>Giuseppe Sellari, Giada Matricardi, Paolo Albiero (IT)</b> The function of music in the development of empathy in children: the construction of the educative path "Music and well-Being" and the evaluation of its effects	<b>Jan Ezendam (NL)</b> <b>Magnus Lindberg Clarinet &amp; Violin Concerto (2004/2006): Analysis and comparative study</b>
11.30	<b>Andrea Malvano (IT)</b> Bipolarismo armonico ed erotico in Jeux di Debussy	<b>Johannella Tafuri (IT)</b> Analysis of expressive singing in children 2-3 years old	
12.00	<b>Domenico Giannetta (IT)</b> Le transizioni modali nella musica di Claude Debussy	<b>Maria Grazia Bellia (IT)</b> Procedimenti compositivi nell'improvvisazione collettiva. Un'esperienza nella scuola primaria	
12.30	<b>Vasilis Kallis (CY)</b> Debussy's Nuages (Nocturnes, I): 'tonality', pitch material, and issues of inheritance	<b>Maria Perri (IT)</b> Analysis of infant songs in Europe and China: a comparative study	

## Saturday afternoon, 1 October

	<b>SALA ACCADEMICA</b>	<b>BIBLIOTECA</b>	<b>SALA DEI MEDAGLIONI</b>
	<b>Analysis and Performance (II)</b> Chair: Laurence Wuidar	Corelli Chair: Egidio Pozzi	Compositional Processes Chair: Susanna Pasticci
15.00	Aurélie Fraboulet Meyer (FR) <i>Corps, Interprétation et Emotions</i>	Florian Edler (DE) Zum Verhältnis von Fugen- und Sequenztechnik in Arcangelo Corellis "freien" Instrumentalkompositionen	Susana Kasyan (FR) <i>La notion de varietas et le processus de composition dans la musique du XV<sup>e</sup> siècle</i>
15.30	Iolanda Incasa, Enrica Fabbri, Mario Baroni, Roberto Caterina (IT) <i>Musical and psychological functions of facial expressions and body movements in piano players</i>	Ana Lombardía (ES) <i>Mid-18<sup>th</sup>-century violin sonatas composed in Madrid: Corelli's op. 5 as a model?</i>	Richard McGregor (GB) <i>'Active Agony' within Wolfgang Rihm's Tu-tuguri and the 4<sup>th</sup> String Quartet</i>
16.00	Enrica Fabbri, Fabio Regazzi, Iolanda Incasa, Mario Baroni (IT) <i>Styles in performance: comparisons between two different pieces and among seven different performers</i>	Federico Furnari (IT) <i>Variazioni sul tema della Follia di Spagna nelle raccolte settecentesche di Tomaso Antonio Vitali e Arcangelo Corelli</i>	Nena Beretin (AU) <i>Composer/performer collaboration: Elliott Carter and David Starobin for the guitar solo Changes (1983)</i>
16.30	<b>COFFEE BREAK</b>		
	<b>SALA ACCADEMICA</b>	<b>BIBLIOTECA</b>	<b>SALA DEI MEDAGLIONI</b>
	<b>Analysis and Communication</b> Chair: Johannella Tafuri	Timbre and Texture (I) Chair: Yi-Cheng Wu	New Technologies (I) Chair: Settimio Fiorenzo Palermo
17.00	Jean-Marc Chouvel (FR) <i>L'analyse musicale et le problème de la représentation</i>	Violaine de Larminat (FR) <i>Densità e trasparenza del materiale sonoro dell'Opus Number Zoo Nr. 2 (Il Cavallino) di Berio</i>	Bruno Bossis (FR) <i>La relation processus/résultat et l'analyse des musiques avec dispositifs programmables</i>
17.30	Franz Zaunschirm (AT) <i>Harmónisches Hören auf Melodieinstrumenten</i>	Carlo Benzi (IT) <i>Gestures and "theater for the ears" in Visage by Luciano Berio</i>	Frédéric Dufeu (FR) <i>Building analytical tools from digital instruments: methods and perspectives for program reconstructions in Max/MSP and SuperCollider</i>
18.00	Roberta De Piccoli (IT) <i>Dai simboli del processo narrativo alle azioni musicali: una forma di comunicazione</i>	Yulia Kreinin (IL) <i>Heterophonic texture since 1945: definition, notation and analysis</i>	Paula Gomes Ribeiro (PT) <i>Interfaces opéra technologie: les dramaturgies de la convergence, Andriesen et Greenaway</i>
18.30		Robert C. Cook (US) <i>Timbre and ecology in the music of George Crumb</i>	
19.00	<b>SALA ACCADEMICA, CONCERT</b>		
20.00	<b>SOCIAL DINNER</b>		

	<b>GYMNASIUM</b>	<b>AULA RESPIGHI</b>	<b>AULA MUSICA ELETTRONICA</b>
	Middle Eastern Music Chair: Ignazio Macchiarella	Hermeneutics II Chair: Ildar Khanhanov	Workshop
15.00	Xavier Hascher (FR) <i>Analyse réductive linéaire et monodie modale: une application à la musique du Maghreb</i>	Sergio Lanza (IT) <i>Figure retoriche e musica del XX secolo: indagine sulla micronarratività</i>	Carlos Agon, Moreno Andreatta (FR) <i>Some OpenMusic-based computational models in computer-aided music theory and analysis</i>
15.30	Jean-Claude Charbonnier (FR) <i>Représentation des systèmes scalaires proche et moyen orientaux sur touche de luth [abstract not received]</i>	Ana Stefanovic (RS) <i>Strategies of explicit narration in music drama</i>	
16.00		Michel Imberty (FR) <i>Émergences du temps et du sens chez Mallarmé et Debussy</i>	
	<b>GYMNASIUM</b>	<b>AULA RESPIGHI</b>	<b>AULA 16</b>
	20 <sup>th</sup> Century Compositional Techniques Chair: Kerri Kotta	Analysis and Performance (III) Chair: Mario Baroni	Workshop
17.00	Elisabeth Heil (DE) <i>Intertextuelle und Intratextuelle Bezüge in Alfred Schnittke's Peer Gynt – Épilog</i>	Mine Doğantancı-Dack (GB) <i>From performance to form: the second movement of Beethoven's Piano Sonata op. 13</i>	Michael Clarke (GB) <i>Working with Interactive Aural Analysis</i>
17.30	Eva Mantzourani (GB) <i>Nikos Skalkottas's Largo Sinfonico (1942-44/46/49): Composing with a superset: unity and diversity in the construction of the musical space</i>	Erica Bisesi, Richard Parncutt (AT) <i>How do musical accents induce emotions?</i>	
18.00	William Helmcke (US) <i>Micropolyphonic texture in Górecki's Symphony n. 3</i>	Mondher Ayari (FR), Olivier Lartillot (F) <i>L'acte créateur entre culture de l'oralité et cognition musicale: Analyse de performance et modélisation informatique</i>	
18.30	Marco Marinoni (IT) <i>La concezione ciclica del tempo musicale in Post-Prae-Ludium N. 1 "per Donau" di Luigi Nono</i>	Raffaella Benini (IT) <i>Au lac de Wallenstadt di Franz Liszt. Un'analisi per l'interpretazione</i>	

## Sunday morning, 2 October

	SALA ACCADEMICA	BIBLIOTECA	SALA DEI MEDAGLIONI
	Liszt: New Perspectives (V) Chair: Rossana Dalmonte	Renaissance Theory Chair: Marco Mangani	Timbre and Texture (II) Chair: Jean-Marc Chouvel
9.00	Bruno Moysan (FR) <i>La pensée formelle des fantaisies pour piano de Liszt</i>	Robert Bauer (DE) <i>Zwischen Kontrapunkt und Klangfläche - satztechnische Studien zur vollstimmigen Vokalpolyphonie</i>	Iwona Lindstedt (PL) <i>Timbre and texture as major structural elements: the analysis of early electro-acoustic works of W. Kotonski and A. Dobrowolski in the context of "sonoristics"</i>
9.30	Roberto Scoccimarro (DE) <i>Liszt's late Lieder production (1862-1886): reworkings, new settings</i>	Adriano Giardina (CH) <i>Formes et fonctions des cadences dans quelques motets de Roland de Lassus</i>	Nicola Verzina (IT) <i>Funzioni macrostrutturali dell'armonia-timbro e della tessitura: osservazioni analitiche su alcune composizioni di Ligeti e Malderna negli anni Sessanta</i>
10.00	Ida Zicari (IT) <i>Relationships between music and dance. A case study on Liszt's Sonata in B minor</i>	Jeremy Grall (US) <i>The roles of sender and receiver and musical signification within sixteenth-century improvisation</i>	Wai Ling Cheong (HK) <i>Timbre and texture as sound-colour in the Gagaku of Messiaen's Sept Haïkaï (1962)</i>

	GYMNASIUM	AULA MUSICA ELETTRONICA	AULA 16
	Panel	New Technologies (II) Chair: Bruno Bossis	Panel (Round Table)
9.00	<i>The boundaries of the spectral subject: temporality, vernacular music and the solo viola in the music of Grisey, Radulescu and Ligeti</i>	Maurizio Gabrieli (IT) ScoreSifter: software for analysis of post-tonal music using domain-based segmentation	Storicità e trascendenza della logica musicale
9.30	Amy Bauer (US), chair <i>Viola as the spectral subject of contemporary music</i> Caroline Chen (US) <i>Process and temporality in Grisey's music</i> Liviu Marinescu (US) <i>Horatiu Radulescu and the primordial sounds of Romania</i>	Olivier Lartillot (FI) <i>A computational framework for comprehensive motivic analysis based on a cognitive modelling</i>	Mauro Mastropasqua (IT), chair Paolo Cecchi (IT) Maurizio Giani (IT) Andrea Lanza (IT)
10.00		Damien Sagrillo (LU) <i>Scales, melodic traits and forms in German folksongs. Automated folksong analysis by EsAC</i>	

## 11.00 - Sala Accademica, Plenary session

### Music analysis tomorrow. New perspectives, new repertoires, new theories

Giorgio Sanguinetti (IT), chair Schemata theories: a challenge for traditional analysis?

Pieter Bergé (with Felix Diergarten, Markus Neuwirth, Steven Vande Moortele, BE). On the future of Formenlehre: a european perspective

Richard Parncutt (AT), The transdisciplinary foundation of (European) music theory

Philip Tagg (GB), Cleaning up Tonal Terminology

## Sunday afternoon

Executive meeting of the delegates of the European Music Analysis Societies

# Abstracts

## Panels and Sessions

**STEFANIE ACEVEDO** (University at Buffalo, United States)

*Segmentational approaches of atonal music: a study based on a general theory of segmentation for music analysis*

The complexity of atonal musical structures has led theorists to offer varying analyses of atonal works. This ambiguity stems from the intricacies of human perception: is it possible to state a definitive analysis when perceptions differ? In order to justify a segmentation, the analyst must provide supporting evidence in the music. Due to the wide range of perception, this evidence yields analyses that are more or less persuasive, but neither correct nor incorrect. David S. Lefkowitz and Kristin Taavola, however, propose a mathematical model that defines a correct segmentation.

This paper briefly compares Lefkowitz and Taavola's mathematical theory to James Tenney and Larry Polansky's perception-based theory. While Tenney and Polansky's theory, like Lefkowitz and Taavola's, was originally a computational model, it is rooted in visual *Gestalt* perception; the model provides the foundation for Dora A. Hanninen's segmentation theory. I then employ Hanninen's analytical framework to identify segmentational boundaries that support published analyses of two atonal works: the fourth of Anton Webern's *Fünf Sätze*, op. 5 and an excerpt from Arnold Schoenberg's *Klavierstücke*, op. 11, n. 1. I apply two of Hanninen's three segmentational criteria: the sonic, which refers to acoustical properties, and the contextual, which refers to categorizations, such as set-classes.

Lefkowitz and Taavola note that Tenney and Polansky's theory cannot be applied to polyphony. Although Tenney and Polansky concede this point, Hanninen encourages the use of her theory for polyphonic segmentation. She does not, however, provide a method for addressing polyphony. Thus, I combine aspects from Lefkowitz and Taavola's simultaneous analysis with Hanninen's theory in order to formulate a basic method for segmenting polyphonic music.

I find that sonic and contextual criteria in the music strongly support the analyses by George Perle, Allen Forte, Gary Wittlich, and Charles Burkhart. Due to the emphasis of set-class theory for atonal analysis, there is an inherent reliance on contextual criteria; however, sonic criteria also reinforce their segmentations and sometimes may even support their contextual criteria in places lacking local sonic criteria. Thus, the musical structures strongly support the segmentations, validating the diversity of analyses and suggesting that atonal music can legitimately be heard in different ways.

The repertory of didactic works attributed to or associated with Leonardo Leo (1694-1744) includes, apart from exercises in hexachord solmization, *solfeggi* and *partimenti*, also several *disposizioni*, fugues and a counterpoint treatise which has been transmitted in a number of variants. These sources may relate to Leo's activities as a *maestro* at the Conservatorio di Santa Maria della Pietà dei Turchini and the Conservatorio di Sant'Onofrio a Capuana in Naples since the middle of the 1730s. The *disposizioni* are mostly three-part realizations of a given bass, some of which focus on polyphonic techniques such as imitation and invertible counterpoint. The fugues often display some remarks commenting their structure. Similar remarks are found in the treatise, which closes with a discussion of types of fugue, imitation, ricercar and canon, after having dealt with topics such as interval, mode, dissonance treatment and modulation. To some extent, this treatise depends on the *Riflessioni armoniche* by the Franciscan friar Domenico Scorpione (c1645-after 1708) that was printed in Naples in 1701. This theorist's significance to the "Neapolitan School" in the first half of the 18<sup>th</sup> century is also highlighted by the background of a portrait of the Neapolitan *maestro* Francesco Feo (1691-1761), made for Padre Martini's library in Bologna, which shows the back of three books lettered with the names "Scorpione", "Fux" and "Zarlino".

Since the early 19<sup>th</sup> century the rumour has been circulating among music historians that Leonardo Leo and Francesco Durante (1684-1755) were the initiators of two opposing compositional "schools" within the Neapolitan musical landscape, that embraced different "rules", "methods" or "systems". Durante's "method" is said to have been the more successful of both: it characterized the "Neapolitan School" for generations, whereas Leo's "system" perished much earlier. However, what exactly underlies this alleged opposition still remains unclear. My analysis of the extant sources thus aims at a reconstruction of Leo's contrapuntal teaching, enabling a more precise evaluation of this rumour. Moreover, since the research on composition pedagogy in Naples in the 18<sup>th</sup> century done so far by Rosa Cafiero, Giorgio Sanguinetti, Robert Gjerdingen and Ludwig Holtmeier has been mainly focused on *partimenti* and, to a lesser extent, *solfeggi*, a closer investigation of this part of the didactic repertory helps to complete our picture of music theory and education in that city at that time. The sources represent a very conservative idiom, compared with the "galant style" of the *partimenti* and *solfeggi*. However, these styles belong to the same musical cosmos in which musicians of the time lived and can be understood as being rooted in a common way of musical thinking, dominated by more or less standardized intervallic progressions.

In his theory, William Caplin describes classical style as a network of functions that express themselves on various levels. Intrathematic level concern how themes are made: most recurring theme types are sentence, period and small ternary. Each of them shows standard functions within it (e.g., in sentence we find a presentation, a continuation and a cadential function).

William Caplin creates his theory to describe classical style. In this paper, we will use a part of it to investigate Liszt's music from Weimar period, particularly: Symphonic Poems, Sonata, Ballade n. 2, *Grosses Konzert solo*, etc. The features of the theory which apply to Liszt's music and are very useful in investigating it are the sentence type and its presentation and continuation functions. Sentence is the most recurring form of Liszt's main themes, and thus presentation is the standard way Liszt uses to state them. Presentation may be larger and more articulate than in classical style, and its harmonic content can be more than a mere prolongation of tonic harmony (e.g. *Prometheus*, main theme). The basic idea may be repeated more than once (Sonata, main theme).

Continuation function is too a useful analytical device: fragmentation and harmonic acceleration are often very clear and strongly underline ongoing character of continuation phrase.

What instead is totally different is the cadential phase. In classical style, as a rule, cadential progression fixes the boundaries of the continuation phrase and thus of the sentence. In Liszt's Weimar music, on the contrary, it is rare to find a sentence which simply ends with a cadential progression: harmonic progressions become more and more unstable through the continuation phrase, by means of diminished seventh, sequences, parallel chords and so on. If we chose to underline the role of harmony in theory, we should conclude that continuation phrase in main themes is typically very long, waiting for a cadential progression which is always postponed. We should observe, too, that the length of the continuation phrase allows to state generally new (and often very important) motivic contents (e.g. Sonata, main theme). An alternative way to describe this situation may be a motivic- and textural-based one: sentence ends when a clearly different motivic content and/or a very different texture occur. The character of Liszt's music from the Weimar period often reposes on this ambiguity.

Few other features of Liszt's style are investigated in the paper, in order to show how musical functions meet or do not meet the listener's expectations. Many listening surprises concerns cadences and the way Liszt makes open what should be closed and dynamic what should be static. Eventually, different levels of openness and closure trace a path through the whole piece, and help in investigating its poetic and narrative content.

**TORSTEN MARIO AUGENSTEIN** (Hochschule für Musik Karlsruhe, Germany)

*Falsobordone-settings and vertical-thinking in music: studies on the technique of the 15<sup>th</sup>-18<sup>th</sup> century falsobordone-practice and its influence on harmonic setting*

Almost all studies on three-voice *fauxbourdon*-harmonization of Gregorian chant melodies and the later four voice *falsobordone* refer to the particular influence of these techniques on the development of the structure of the harmonic setting in general. But even so, theory of harmony and analysis seem to neglect this relatively simple and inflexible stile of recitation.

Due to the fact that the use of *falsobordone*-formulas has been cultivated in practice for several centuries, this study wants to prove the importance of this performing practice in relation with the development of harmonic-vertical thinking in chords in contrast to the art of composition in strict counterpoint.

The selected examples show the detachment from the traditional Gregorian psalm tone – a tendency which ranges from the early 15<sup>th</sup> century *fauxbourdon*-psalms to their late forms of the 18<sup>th</sup> century. During this process the *falsobordone* archetype mutates more and more into a frugal form of simple recitation, which increasingly can be found in the 17<sup>th</sup> and 18<sup>th</sup> century setting of psalms.

So my study intends to reveal how the *falsobordone* formula through the centuries was transformed into an economic form of setting for the often immense amount of words of the psalms and in particular how much it influenced the conception of harmony itself.

**MONDHER AYARI, OLIVIER LARTILLOT** (University of Jyväskylä, Finland)

*The creative act between oral culture and music cognition: analysis of performance and computer modelling*

The project is dedicated to the study of oral/aural creativity in Mediterranean traditional cultures. The methodological organisation of the project is based on an interactive dialogue between anthropological survey and psychological experimentation, on the one hand, and musical analysis and cognitive modelling, on the other.

We propose to define the psychological processes and the interactive levels of cognitive processing underlying the perception of modal structures in *maqām* improvisations. One aim of this research is to study the articulation between the conventions defined in music traditions and the creativity induced in new musical improvisations, as well as the impact of orality in the musical practice, and to explore the notions of "formulae", "patterns" and "gestalts."

We study the influence of cultural knowledge in the way improvisations from musical traditions of the Mediterranean area are perceived and understood by listeners from various cultures. A cognitive modelling of the segmentation strategies is conceived as a complex articulation between purely perceptual rules and cultural knowledge. A set of rules is established, describing in detail the modal characteristics of *maqām* and how listeners understand them. A comparison of segmentation strategies by listeners of various cultures and computational predictions shows that, whereas a cognitive model purely based on perceptual rules may offer some explanation of listeners' behaviours, the integration of cultural knowledge enables a deeper but at the same time clearer interpretation of the ways listeners construct a structural understanding of the improvisation. The cultural knowledge that has been added in the computational model is based on a set of general mechanisms (scales, set of notes, numeric "activation" value associated to each mode and each *jins*, etc.) that might be considered as abstract rules of *maqām* music. As such, its applicability to the analysis of related traditions would be of particular interest.

By implementing a new model describing aspects of music analysis, music perception and music cognition into a computational model, this enables to build a systematic model where theoretical hypotheses can be fully tested. The predictions suggested by the computational model based on the theoretical hypotheses, once they are confronted with concrete musical cases and listeners' judgments, enable to question those theoretical hypotheses and to improve both the theoretical models and the resulting computational algorithms. We obtained in fine a computational model that has been perception-tested, and that can be subsequently applied to the analysis of more complex pieces of music. The resulting model will be made available to the research community in the form of a new software called *CréMusCult*.

The methods of musical training current in Italy during the nineteenth century had remained essentially unchanged since the 1700s. They differ profoundly from conventional modern teachings, comprising a body of guidelines and rules that had evolved over centuries to meet the demands of the church, the court, and the opera industry by allowing trained professionals to produce effective compositions and performances in a remarkably short time.

The pedagogical tradition gradually faded away during Puccini's lifetime (1858-1924), together with the practices and industries that gave rise to it, and is now largely forgotten. It has recently come to light through research on the Neapolitan partimento, by scholars such as Cafiero, Gjerdingen, and Sanguinetti.

This paper surveys some of the fundamentals, methods, and formulas that were taught at Italian music conservatories during the 19<sup>th</sup> century and explores their significance for arias by Bellini, Donizetti and Puccini. It seeks to offer a guide to the interpretation and appreciation of Italian opera in terms that would have been understood by contemporary composers and performers.

Studies on musical performance over the last twenty years have well defined the route between the written page and the perception of the work, passing through the phase of performance.

The composer codifies his work, which has a formal structure and an implicit expressive profile; the performer reads and studies the written score and draws information that will be used in giving the work its sensible form [Sundberg 1991; Clarke 1991]; at the same time he/she transforms a performing plan into sonic micro events that coincide with the actual performance [Sundberg-Fryden-Askenfelt 1983; Cone 1995; Juslin-Friberg-Bresin 2002]. Finally, the listener perceives the performance and gives sense to actual music [Baroni 1999]. Over the last years a large part of the studies have concentrated in particular on the activity of the listener [Juslin 2001; Gabrielsson-Lindstrom 2001, Juslin-Sloboda 2010] with specific attention to the recognition of emotional profiles.

The transformation of the written page into a performing plan, i.e. the first phase of the whole process, is connected to the actual performance, but it is of a different nature [Rothstein 1995; Troncon 1999; Dalmonte 1996; Rink 2007]; it is a difficult area to investigate because it cannot be an object of direct observation, and this is probably why it has been less studied. Our project is an attempt to offer a contribution to clarify this specific problem.

Our aim is to understand better the strategies the performer uses to transform the written page into a performing plan, with the underlying idea that the first approach to the text involves some form of analytical activity, implicit or explicit [Lester 1995; Rink 2002; Rink 2007]. A questionnaire was given to a sample of 50 professional pianists with different years and forms of experience and different school formation. Its main aim was to investigate the role of structural knowledge in the study of the score (vs. historical knowledge or expressive intentions). Another aim was to obtain information about the knowledge and use of modern analytical techniques. Our research started with a pilot project in which some broad and quite differentiated questions were posed to a limited number of pianists. On the basis of its results we planned a more specific system of 31 questions. The paper will show in detail the results of a statistical analysis of the responses given to each question in order to map the different approaches to the analytical procedures present in the wide-ranging world of music performance. Results like these can be useful not only for scientific and theoretical purposes, but also for practical and pedagogical scopes: for example to offer suggestions for analytical programs in Conservatories and Universities.

**AMY BAUER** (University of California, Irvine, United States)

*Viola as the spectral subject of contemporary music*  
in PANEL: *The boundaries of the spectral subject*

In the late twentieth century the viola emerged as a favorite solo vehicle for composers. The instrument and its new, virtuosic performers offered a vast field of unexplored sonic and dramatic potential that yet retained strong ties to musical tradition. This paper explores three recent works that reconstitute the modernist musical subject in the form of a solo viola. Gérard Grisey's *Prologue* (1976), Horatiu Radulescu's *Das Andere* (1983) and György Ligeti's Sonata (1991-94) explore uncharted and unformalizable possibilities of timbral resonance, performer physicality and musical drama.

Grisey suggested the solo viola as the formal prologue to the birth of spectral music with the introduction to his six-movement *Les espaces acoustiques*. *Prologue* is built on a simple moment of respiration alternated with a heartbeat, which moves towards an impossible ideal: the approximation of a sine wave. That the performer will fail in this endeavour marks it as a prologue, which opens the first of six acoustic and imaginary spaces. Radulescu referred to the *Andere* of his eponymous work as an "alter ego," a "psychoacoustic phantom," that subsumes and separates the subject from itself. Novel articulations, register polarities and battling frequencies represent the dialectical engagement of two characters founded on opposite principles. Their struggle for hegemony seems to collapse without drama or victor, leaving the ghost of the "other" in the hidden harmonicity between their diverse spectra, and the multiphonics that emerge from the low C string. The sound of the viola's tender C string inspired Ligeti's "fantasy sonata," with a first movement *Hora lungă* that employs this string to create a virtual extension of the instrument's range. The Sonata as a whole moves from this imaginary instrument with its unique tuning to the imaginary rhythms and harmonies of movements II and III. The fourth movement adds imaginary timbres to this scenario, while the fifth movement, *Lamento*, is a sobering return to the Baroque roots of the Sonata. In the Sonata Ligeti creates an imaginary instrument to reconstruct a tradition that might have, but never actually did, existed: a tradition that unites art with folk, the common with the obscure, and the simple with the wildly virtuosic. Where the sonata model once stood, lies a collection of variations without a distinct theme, etudes that prefigure their own existence by pointing towards the absent object.

Through the exploration of boundaries – the limits of the instrument and of musical elements considered peripheral to the Western tradition – these three compositions express the modern subject in all its "spectral" liminality. Their pursuit of phantasmatic musical ideals performs a critical, self-reflective function even as it answers John Croft's plea for a new poetics of music that «reclaims the relation to environment and to the past as something critical and crucial.»

**ROBERT BAUER** (Hochschule für Musik Freiburg im Breisgau, Germany)

*Between counterpoint and sound mass: studies towards the compositional techniques in full voice vocal polyphony*

During the Renaissance, but also up through the eighteenth century, the composition of vocal music consisting of six, eight or more voices may be regarded as a standard practice that many composers would have mastered as a part of their musical education. Works like *Spem in alium nunquam habui* for 40 voices by Thomas Tallis or *Qui habitat in adiutorio altissimi* for 24 voices by Josquin Desprez are indicative of the impressive skills that such composers possessed in this idiom. When considering these (and other) works, the prevalent twentieth-century understanding of Renaissance polyphony poses the question: how were these composers able to construct such extreme musical textures of so many voices without breaking the seemingly inviolable rules of counterpoint? However, there was no strict separation between counterpoint and harmony in the eyes of sixteenth-century composers. In contradiction to Jeppesen's theory that polyphonic voices are of equal status, it seems more than logical that a setting of twelve or even many more voices is only possible if the composer has a clear idea of a harmonic "skeleton" which can be elaborated by adding "filling voices". (Palestrina, for example, used the lute when composing his six-voice *Missa Papae Marcelli* before crafting the single voices.) The possible number of filling voices is different for each chord change and can be increased by way of suspensions. Changes between fifth- and third-related triads allow a larger number of voices than between neighboured triads. There is no doubt about the fact that composers were very much aware of the importance of voice hierarchy. In the seventeenth century it was still common practice in compositional education to reduce full-voiced works by Palestrina to a skeleton of three or four voices by taking out the non-essential filling voices. The more voices a composition employs, the more salient the typical features of such filling voices become: a propensity of movement by leaps or lengthy repetitions of the same note are especially characteristic, even though such features are often in opposition to the rules suggested by conventional counterpoint textbooks for creating melodic lines. Examining this aspect of the full-voiced compositional idiom can provide much insight into how works like *Spem in alium* were composed. Ultimately, the setting of a full-voiced motet in the style of the sixteenth century demands a skilled musical "craftsman", but not necessarily a "genius" – at least not in nineteenth-century sense of the word. Seen in this way, the pedagogical value of including this technique on conservatory curriculums is worth reconsidering.

*About the pedagogy of Schenkerian analysis*

Our paper will concentrate on several analyses of a work that is problematic both in form and structure, Schumann's *Träumerei* (*Kinderszenen*, op. 15 n. 7):

- Schenker's own analysis in *Der Tonwille* 10 [1924], pp. 36-39, characterized by the description of a sinuous *Urlinie*, in three successive arches determining "a small three-part song form".
- A manuscript addition in Schenker's own copy of *Der Tonwille* (Oster Collection, New York Public Library), modifying his first analysis by the notation of an "interruption" (a concept that he had not yet developed in 1924.) The interruption suggests a binary form.
- A "post-Schenkerian" analysis by Célestin Deliège in *Analyse musicale* 2 [1986], apparently written without knowledge of Schenker's analysis. Deliège's description, imbedding the first sections as prolongations within the last one, suggests a one-part form.
- Our own analysis, differing from but inspired by the previous ones.

Taking account of the evolution of Schenkerian concepts in these analyses allows reconsidering Schenkerian theory in a less dogmatic aspect than is sometimes the case:

- Schenker's own analyses show how the concept of the Fundamental line arose from a freer conception of the *Urlinie*, the "line of origin", itself linked with melodic and motivic analysis.
- The comparison between the analyses also invites a re-evaluation of the concept of "divider at the fifth", which remains puzzling in modern Schenkerian theory.
- Schenker's addition of an interruption in his own copy of *Der Tonwille* and our revision of the localization of this interruption have dramatic consequences on the description of the form of the piece and of its tonal strategy.
- The evolution of the graphs and the differences between them raises the question of their function and reminds that graphs cannot be the aim of the analysis and that their role is to help reading the score.

Each of these analyses contains suggestions for the performance of the piece. The general tendency is towards an increased conception of the work as a unified gesture, as an organic unity, a tendency perceptible also in the changes in the description of the form. The purpose of an analysis is not to prescribe a performance. If the variety of the analyses discussed here does reflect the complexity of the piece itself and proposes various ways of disentangling it, it will nevertheless remain the task of the performer to make her/his own choice among these possibilities and to elaborate this choice in her/his performance.

*Composing music in collective improvisation. An experience with primary school children*

In the last three decades, there have been many studies on collective musical improvisation and composition with groups of children or adolescents. Scholars have repeatedly noted the importance for children of experimenting with music through actual compositional activities, made possible also by the extension of the notion of music in the avantgardes. There have been important studies on didactic approaches that stimulate composition and improvisation in children as well as studies that have analysed composition procedures adopted in the above cases. In a recent study [Bellia-Ferrari 2008], we have tried to verify the extent to which the use of movement within a "scenic space" could favour musical invention. For this purpose, children were invited to construct sound events starting from graphs. The results confirmed the initial hypothesis, showing how movement and interaction within a scenic space played a crucial role in the production of sound events. The possibility of moving stimulated in children a more explorative and creative attitude in relation to the graphic stimulus, compared to children in the control group. The absence of movement instead led children to produce a more structured and orderly musical invention, closer to the original graphic stimulus. In the light of our previous results, the present research was aimed at studying the sound events produced by children in our previous study through an analysis of their musical structures. The goal was to verify if the structures evidenced by the analysis were related to the specific behaviours displayed in the scenic action. More specifically, we studied whether those behaviours produced specific sound structures with a beginning, development and end. The authors have analysed a corpus of improvisations produced by 16 fourth-graders in the previous study. The material consists of 48 videos and 36 audio recordings, as well as 32 questionnaires dealing with the children's experience. The recorded improvisations were studied on the basis of a grid specifically designed to evidence the musical structures spontaneously adopted by the children. Specifically, the following aspects were taken into consideration:

- characteristics typical of beginnings, for example, the presence of minimal elements that were then amplified, extended or complicated; a single or a few sounds followed by pauses; the presentation of a theme, of a sound idea; an initial explosion, etc.
- characteristics typical of conclusions, such as an acceleration or final close; slowing down, gradual distancing; sudden conclusion, etc;
- characteristics typical of developments, such as structures based on repetition, contrast, alternation, intensification, etc.

Finally, the results of the analysis carried out on the musical productions of the focus group (the one that used movement) were confronted with those of the control group. During the presentation we will show the structuring procedures of the sound materials preferred by the children along with structural aspects such as musical phrases, progressions, symmetries, etc. We will focus particularly on the main differences between the improvisations in the focus group and in the control group.

**RAFFAELLA BENINI** (Università di Bologna, Italy)

*Au lac de Wallenstadt by Franz Liszt. An analysis for the interpretation*

This paper presents an analysis of Franz Liszt's piano piece *Au lac de Wallendstadt*, with the aim to influence its performance and interpretation.

John Rink [2007] says that, in general, the performer makes the first approach to the piece of music by "informed intuition", that's to say during the performance some interiorized and assimilated stylistic and syntactical models are applied, with more or less awareness, by the musicians. Therefore the performer may improve interpretative and technical choices, as well as enhance the process of memorization; that's achieved through an analysis of the musical piece in order to grasp the diagrams and formal elements, the tonality and the harmonic movements, the melodic outline, the indications of expression, the rhythmic and, at last, the identification of the structures of the meaning.

This report makes a comparison between the composition's three different versions, which have been revised by the composer during a period of twenty years. The first version already printed and created between 1835 and 1838, was included in the *Album d'un voyageur* (first edition Haslinger-Wien and Richault-Paris, both in 1840); the second, reviewed between 1848 and 1854 appeared in the first volume of *Années de pèlerinage* dedicated to Switzerland (first edition Schott, Mainz 1855). Finally the third version, the only still existing manuscript: that is to say the autograph manuscript preserved in the Philharmonic Academy of Bologna, which constitutes an intermediate version (Florence, 19 January 1839).

The analysis of the piano piece has been made by "integrated method": the direct analysis of the piano score and its performance. Nowadays, the third version is considered the true concert version. The musical piece, far from being considered a mere *foglio d'album*, has a strong architecture, also rich in cyclic references, where rarefaction and simplicity are important aesthetic and artistic results.

This report shows that the comparative analysis of the different editions of the piece, enforced by Liszt's autograph manuscript living voice, can inspire the interpretative choices of the musicians, which are so often influenced by instrumental conventionalism and mannerisms.

**VINCENT P. BENITEZ** (The Pennsylvania State University, United States)

*Harmony and transformational voice-leading in the later music of Olivier Messiaen*

This paper examines transformational voice-leading in Olivier Messiaen's later music (1959–1992) in order to sketch a more dynamic picture of his use of harmony than that typically found in the scholarly literature. To describe Messiaen's more recent harmonic practice, I analyse passages from the *Choral de la Sainte Montagne* from *La Transfiguration de Notre-Seigneur Jésus-Christ* (1965–69), *La Croix* from *Saint François d'Assise* (1975–83), and *Apparition du Christ glorieux* from *Éclairs sur l'Au-Delà...* (1988–92). In these discussions, I construct transformational voice-leading connections between any two chords found in Messiaen's harmonic vocabulary. By tracing the movement of triadically based subsets and/or resonance elements from chord to chord in pitch-class space, which comports with Messiaen's approach to harmony, I show how progressions involving large chords have more direction and focus.

In the *Choral de la Sainte Montagne* from *La Transfiguration*, I analyse harmonic successions comprised of large non-modal chords by partitioning them into two or more discrete subsets and then tracing how they move. Underlying many of these transformations is Messiaen's *Golaud* chord, one of his *accords spéciaux*, which consists of two slide-related triads, (Bb, –) and (A, +). When interpreting the music's voice-leading, I often parse sonorities according to the presence of the *Golaud* chord, which is often modified by Messiaen in the *Choral* to include two minor triads.

In the skylark's song that opens Messiaen's opera, *Saint François d'Assise* which I will discuss next, disjunct voice-leading connections are the norm in pitch-class space, with a fair amount of voice exchange occurring between upper and lower voices. Not surprisingly, this pitch-class counterpoint is realized in an equally unsmooth manner on the musical surface. However, the movement of the music's trichordal set classes is generally smooth due to adjacent moves in set-class space. Besides their involvement in the shaping of musical gestures, set classes impart relative degrees of harmonic tension in each gesture by moving to and/or from those gestures suggesting states of repose.

In the passages that I shall consider from *Apparition du Christ glorieux*, modal and non-modal chords move by crisp and fuzzy transposition as well as inversion, with small routes traversed in transposition and comparatively larger ones in inversion where notes flip around an axis. Indeed, as this paper will show, inversion is a consequential component of the voice-leading driving Messiaen's chordal successions. There are also tonal allusions in these passages, especially pseudo-leading-tone motions that underlie progressions to a cadence. Triadically based subsets continue to determine, furthermore, the movement of chords, particularly non-modal sonorities. Finally, through fusing and splitting, which help to address intercardinality issues, smaller modal chords are successfully linked with larger non-modal ones.

**MARIE-HÉLÈNE BENOIT-OTIS** (University of North Carolina at Chapel Hill, United States)

*Dramaturgy and Wagnerism in Ernest Chausson's Le Roi Arthur*

The genesis of Ernest Chausson's only opera, *Le Roi Arthur* (composed 1886-1895), is marked by a complex relationship with Wagnerian aesthetics. Whereas Chausson tried to "dewagnerize" his libretto so far as possible, he inserted Wagnerian allusions into his score, thoroughly integrating them into his own musical style. In this paper, I will show how Chausson used Wagnerian musical elements in *Le Roi Arthur* to build a dramaturgy that is essentially anti-Wagnerian (or rather anti-Tristanesque). My analysis is focused on the three duets for Lancelot and Genièvre: the love duet from act I, *Délicieux oubli des choses de la terre*; the second-act duet, *Ma Genièvre!*; and the duet that precedes the death of both protagonists in the third act of the opera.

In *Délicieux oubli des choses de la terre*, Chausson constructs the Tristanesque backdrop that he will then use to distinguish his protagonists from Wagner's. This duet takes up the tonality (A $\flat$  major), meter ( $\frac{3}{4}$ ) and global (arch) form of Wagner's famous duet from the second act of *Tristan, O sink hernieder, Nacht der Liebe*. In addition, its first measures are based on a harmonic progression that can be found in a very similar form at the beginning of Wagner's duet. This musical allusion to *O sink hernieder* produces an impression of unity between the lovers that disappears in the next duet, *Ma Genièvre!* In this second duet, Genièvre manipulates Lancelot to make him forget his remorse, and finally succeeds in persuading him to flee with her. Musically, there are no references to *O sink hernieder*; instead, Chausson uses more general allusions to *Tristan*, most notably quotations of the *Tristan*-chord and the deceptive cadence heard at the beginning of the *Tristan* Prelude, and makes relatively extensive use of *Leitmotive* – which are used, however, to underline what separates the lovers: Lancelot's guilt, his sense of honour as a Knight of the Round Table and the perjury inherent in his affair with the Queen. These elements combine to cause the actual separation of Lancelot and Genièvre in the third-act duet. Here, musical allusions to *Tristan und Isolde* are mostly eliminated; the few that remain are associated with Genièvre's desperate efforts to reconquer Lancelot, using various forms of the *Tristan*-chord and of the love theme introduced in *Délicieux oubli des choses de la terre*. However, this Tristanesque rhetoric fails to persuade Lancelot to accept the *Liebestod* offered by Genièvre.

In all three duets, Chausson uses elements inherited from Wagner's musical language in a way that cleverly underlines the originality of his own opera. By associating Genièvre to a musical style that recalls Wagner's couple, and by having Lancelot gradually abandon this style to turn back to the very diatonic music of Arthus and the Round Table, Chausson musically establishes that the analogies between the lovers of *Le Roi Arthur* and those of *Tristan und Isolde* are merely superficial.

**CARLO BENZI** (Conservatorio di Musica "C. Monteverdi", Bolzano, Italy)

*Gesture and "theater for the ears" in Visage by Luciano Berio*

As Berio suggests, *Visage* is characterized by a gestural and a symbolic dimension. The musical gesture can be defined as a sound event with a particular direction in pitch or rhythm. It has also a strong symbolic dimension, coming from its presence in the vocal and instrumental repertoire of the different centuries with specific, expressive and recognizable inflexions. In *Visage* some micro-formal elements can be interpreted as gestures, because of their clear parametric direction. Also some time-extended processes characterizing the middle- and macro-form of the piece can be considered as gestures.

What are the "concrete" or sonic dimensions of gestures in *Visage*? And what are the symbolic ones? The sonogram analysis of the piece can help us to define the first ones, whereas the reflexion about the structural and expressive functions of the gestures concerns the others. Nevertheless, the symbolic dimension is not only depending on the characters of the voice (i.e. on phonology): the piece also shows a strong theatrical connotation.

How can we consider *Visage* as a theatrical work, despite the fact that it was produced at the Studio di Fonologia of Milano for radio broadcasting (not just a medium, but also a means able to influence the "dramaturgy" of electroacoustic pieces)? We also need to investigate the theatrical dimension of this piece and the voice of Cathy Berberian pronouncing a text intersected with synthetic sounds.

The expression "theater for the ears" describes a piece that, while not using a literary text, can nevertheless give to the listeners the impression of a theatrical performance. Is Berio's expression just a metaphor or a real concept which connects gesture and theatricality together in order to improve musical communication? According to the latter case listeners should interpret the formal and symbolic dimensions not very differently from the analysis based upon Berio's statements and the sonogram of the piece.

In order to analyse it we set first segmentation-criteria, define the sound structures we want to identify and check whether *Visage*'s form is hierarchically ordered through easily recognizable micro-, middle- and macro-structures. We compare then these results with those of a group of skilled (i.e. with knowledge of electroacoustic music) and not skilled listeners in order to verify coincidences between perceived form and form detected from the sonogram.

The groups of listeners are also asked to link specific sound events with a symbolic dimension referring to human experiences they are usually related with. We can therefore understand whether gestural and "ear-related theatrical" dimensions are present in *Visage* and validate the initial hypothesis, according to which the piece is characterized by gestures and sonic theatricality with symbolic value.

This paper will discuss the extent of the symbiotic relationship between composer Elliott Carter and guitarist David Starobin, and the influence of Starobin on the final version of the guitar solo *Changes*. This discussion will focus on the ways in which the composer and performer struggled to overcome the limitations of the classical guitar and, in particular, to cope with issues of sound projection and other factors that affects the guitar's audibility.

Starobin initially approached Carter in 1979 while the guitarist was engaged to perform *Syringa* (1978), with the chamber ensemble Speculum Musicae. Starobin then actively pursued Carter for another three years in an effort to persuade him to write a solo work for guitar. In principle, Carter was interested but he had several pending commissions, and so he felt unable to commit himself to Starobin's proposal. In December 1982, when another Speculum Musicae concert brought Carter and Starobin together again, Carter declared, «I think I'm about to do it. I'm getting ideas for it and I know pretty much what it's going to be.»

Composing a work for solo classical guitar presented Carter with unique challenges and resulted in four versions of *Changes* before its publication. Carter admitted that, before composing *Changes*, he had limited experience with the guitar. The composer had utilized the guitar in its traditional role as an accompanying instrument for a single vocal piece and two chamber works.

The virtuosity, reputation and persistence of Starobin were the primary factors that moved Carter to consider and accept the commission. In fact, Starobin's dedication to performing all three of Carter's works requiring the guitar was seminal to Carter's acceptance of the commission.

Carter embarked on the composition of *Changes* without prior consultation with Starobin about the technical limitations and the idiomatic constraints of the classical guitar. Starobin solved many technical issues and explained idiomatic techniques to Carter throughout the compositional process via correspondence as well as in several meetings in 1983. Starobin further undertook the final proofreading and editing of *Changes* before its publication with Boosey and Hawkes in 1986.

This study identifies some basic strategies for the long-range deployment of metric dissonance in rock music, with a focus on Anglophone classic rock and progressive rock, a genre in which metric play is a stylistic hallmark. Although the majority of rock songs are in a regular  $\frac{4}{4}$  metre with metric dissonance expressed only through surface rhythms, in some cases the structural use of metric dissonance helps to define the form, in a manner analogous to a large-scale tonal or motivic plan. Such large-scale schemes of metric tension and resolution often support analogous patterns in other domains such as pitch, texture, and timbre. This study offers categorization schemes for both the degree and pervasiveness of metric dissonance in rock songs and for patterns of metric consonance that are common enough to serve as norms.

The most common scheme is found in verse-chorus forms, and features indirect metric dissonance between an irregular metre in the verse and a regular one in the chorus or refrain, commensurate with the "loose verse/tight chorus" model proposed in Temperley [2007] in which choruses are more consonant, rhythmically regular, and texturally unified than verses. Choruses are typically marked for special attention by multiple parameters: a repeated text in the form of unchanging lyrics, additional voices and/or instruments in the texture, and a musically memorable melodic or harmonic motive or "hook". A shift from irregular to regular metre can serve as an additional parameter that intensifies the sense of both culmination and resolution in the chorus or refrain.

A simpler configuration of indirect metric dissonance frames a regular central section with outer irregular sections. The reverse formal configuration of a central asymmetric section with outer sections in  $\frac{4}{4}$  is rare, probably because symmetric metres provide a more comfortable background for the improvised solos that normally occur in the middle section. Direct dissonance in rock music most commonly occurs either throughout the entire song – a static formal paradigm not considered here – or in the climactic middle section of a precomposed extended form, functioning as a development section. Such large-scale arcs are strongly isomorphic with the tonal and motivic patterns of establishment, departure, and return that underlies much common-practice art music.

**CARLO BIANCHI** (Brescia, Italy)

*Ferruccio Busoni and the emotions of a Bachian Nachdichtung. The Fantasy for piano "to the memory of my father Ferdinando"*

Busoni wrote the *Fantasia nach Johann Sebastian Bach* for piano in 1909, three days after the death of his father Ferdinando. The *Fantasia* builds on organ pieces by Johann Sebastian Bach – specifically the chorales *Christ du bist der helle Tag* (from the Partita BWV 766) and the well-known *Gottes Sohn ist kommen* (*In dulci Jubilo*). While these quotations from Bach are evident, a noteworthy part of the work is original. The *Fantasia* is neither a mere transcription, nor properly a paraphrase. Busoni himself called it *Nachdichtung*, using an almost untranslatable German term which indicates the reconstruction of an original text in another style.

A brief analysis of the compositional procedures of the *Fantasia* in their objective specificity – focusing on thematic, harmonic, and formal characteristics – sheds light on the extra-musical values that Busoni was expressing through this work. The *Fantasia* is unusually open in revealing the implied emotions. «The piece dedicated to the memory of Babbo is written from the heart and all those who have heard it were moved to tears, without knowing its intimate destination» – Busoni told his mother.

Given the several pregnant words written by Busoni himself on the score, the memory of his father Ferdinando emerges both from the symbolic (religious) meanings previously associated to the Bach chorales, and from the modern style with which Busoni reconstructs them.

**ENRICO BIANCHI, MARIE BERNADETTE SABATELLI** (Universität Wien, Austria)

*The vocal "body" of popular music*

The history of popular music is characterized by the increasing show of the vocal body. The tools of technology, beginning from the mechanical reproduction, have allowed us to highlight every vocal detail and to direct the attention of the listener towards the corporeity of sound. According to such perspective the material aspect of voice gains great importance as a subject of research. Roland Barthes stated that "the vocal grain" is the place of communication of the pleasures of listening. He described the "grain" as a purely material element able to come into direct contact with the body of the listener arousing a sense of "*juissance*" (enjoyment) [Barthes 1972]. Recent musicology underlined how music has a close link with the body and showed how this relationship constitutes one of the most meaningful aspects of the phenomenon called "popular" [Middleton 1990]. Since the 90s the psychological school of Upssala [Juslin 2008] has conducted some studies on the expression of emotions in musical language setting a grid in which the emotional answers of the performers and the listeners are pointed out in relationship to some specific sound-musical parameters. This study was born with the aim of discussing, within a cross-disciplinary view, the attainments of the electroacoustic and the neuroscience to check if, and how, the elements that constitute the physics of the vocal body are efficiently able to communicate the basic emotions with particular reference to vocality in popular music. A comparative analysis of the vocality of two singers (Céline Dion e Björk) will be carried out through electroacoustic research. The main concern will be the evaluation of the fundamental frequency (f0), which allows us to consider aspects of the profile of intonation up to the tiniest variations in pitch (*vibrato*), and sonographic representations that highlight the timbral features and the possible modulations of the vocal colour. With this procedure we aim to identify comparable sound units that could cause specific psychological reactions in the listeners. The perceptive aspect of the vocal bodies analysed will be eventually considered to point out the effects of sense and the emotional answers that single sound identities could evoke. The perceptive and emotional musical experiences cause some changes on the vegetative system: changes of blood pressure, heart rate, breathing, psycho-galvanic reflex and other functions. These changes represent the reflex of psychological processes on the vegetative system induced by music and linked to the emotional reactivity, to the individual attitude towards music, as performers or listeners. Which brain reactions can explain these effects? A hypothesis is that music is seen as a sparkle of the motor and physiological functions: music drives the body. From a neurophysiologic viewpoint, the effects of music on the body could be mediated through motor sensory circuits that work with a feedback mechanism: the system of mirror neurons [Rizzolatti-Sinigaglia 2006]. This work intends to enter into the debate concerning the role of *sound* and its psychological implications in the contemporary musical expressions, starting from a simple statement: there are many analyses focused on the formal aspect of traditional parameters, while rarer are those that take into proper account the perceptively remarkable aspects.

*Self-reflective dramaturgy in Rossini's opere buffe*

In a discussion of approaches to analysis, textual criticism, and examination of the dramaturgy of nineteenth-century opera, my paper will examine the self-reflective dramaturgy in Rossini's *opere buffe*. The self-referentiality in the genre of Italian *opera buffa* dates back as early as the 18<sup>th</sup> century, a famous example being Mozart's *Don Giovanni* quoting *La cosa rara*, *I litiganti*, and the composer's own *Le nozze di Figaro*.

In addition to the traditional use of comedic techniques with a direct provenance in the spoken theatre (such as verbal repetition) or in the *Commedia dell'Arte* (such as puns and slapstick), I will discuss how Rossini uses specific self-referential techniques in the plot devices, the dramatic situations, and particularly in his deliberate use of specific music formal structures, which were already established as a norm in Italian contemporary opera. Rossini uses these formal conventions to either intensify or to completely negate the dramatic situation at hand. More specifically will be discussed the use of *crescendo*, sonata form, and the deliberate slowing down of the dramatic action through extensive, repetitive vocal virtuosity for comic relief in a critical dramatic situation, while one of the characters complains about this and begs the other participants to make haste and to quit the vocalizing. Rossini's use of a self-reflective dramaturgy in his *opere buffe* exploits the communication between composer, performers, and audience, and creates new possibilities for humour, in interdependence between the deliberate use of artifice and the detection and appreciation of artifice by the audience.

As I will discuss, the self-reflection even results in presenting the dramatic situation and its musical setting as a meta-commentary about the traditional formal structures of Italian opera itself as a genre.

*How do musical accents induce emotions?*

In what way does musical emotion depend on musical structure and expressivity? Sloboda [1991] related structural elements such as sequences and unexpected harmonies to emotional responses. Juslin [2000] explored the relationship between basic emotions and the musical surface (tempo, dynamics, articulation). The question may be clarified by separating emotion in notated music into immanent emotion (emotion that is latent in the score) and performed emotion (emotion that is contributed by the individual performer). We have been applying the same distinction to musical accents, defined generally as events that attract attention; immanent accents occur at phrase onsets, downbeats, melodic peaks and harmonic dissonances, while performed accents may be agogic, dynamic, articulatory or timbral [Parncutt 2003]. Our recent research has addressed how performers emphasize immanent accents by means of performed accents. We asked music theorists to analyse a selection of Chopin Preludes by marking immanent accents on the score and evaluating their relative importance (salience). These data are being used to generate expressive performances based on the principle of emphasizing immanent accents [Bisesi-Parncutt-Friberg 2011]. These artificially generated performances are being evaluated in listening experiments and compared with commercially available performances. What kind of emotion is expressed by what kind of emphasis of what kind of accent? We are generating different interpretations of a selection of Chopin Preludes using the computer program *Director Musices* [Friberg-Bresin-Sundberg 2006]. The interpretations differ in the kinds of accents that are chosen for emphasis in performance (grouping, metrical, melodic, harmonic) and the kinds of emphasis (timing, dynamics, or both). First, individual listeners are asked to describe the emotional character of the performance. The analysis of their responses involves categorization of terms describing emotions such as joyful and sad, static and dynamic, expected and surprising. Second, participants rate the emotional character of the performances on rating scales depending on previous categorization. Participants in both experiments are divided into musicians and non-musicians. To shed new light on expressive performance, we are striving for a new interdisciplinary synergy. Our approach links together music theory/analysis and expressive music performance using psychological research methods. We are challenging these three disciplines to work more closely together and take each other's ideas and methods more seriously. Our approach lends itself to application in higher education by giving students and teachers a framework for the analysis of scores and recordings that will help them understand and develop their interpretive skills.

This research is supported by Lise Meitner Project M 1186-N23 *Measuring and modelling expression in piano performance* of the Austrian Research Fund (FWF).

**WENDELIN BITZAN** (Universität der Künste Berlin, Germany)

*Neverending canon. Pedagogic approaches to two-part canonical passages from Josquin's masses*

Two-part canonical passages can be found at various positions in Josquin's masses, such as the *Crucifixus*, *Pleni sunt coeli* or *Benedictus* movements. In some cases, the music employs a structure of certain interest: both voices form a neverending *fuga* throughout the whole passage. This feature might be a legacy of the *bicinia* in Ockeghem's masses – the frequent use of *cadenze sfuggite*, if there are cadences at all, make up a continuous and always self-superposing musical flow. Most artistically, the *Credo* from *Missa Pange lingua* even makes use of regular *clausulae* and cadences without abandoning the canon.

In contrast to Ockeghem, Josquin occasionally takes his canons so seriously that he dares to neglect the principle of *varietas*. Themes are repeated and multiplied, occur alternating in both voices, and exploit their whole contrapuntal possibilities. In this context, *redicta* figures are so common that they lack any further semantic aspect.

These examples may be used with benefit in music theory, counterpoint and analysis classes. There are multiple ways of access, which I will illustrate with the help of three different *bicinia* from Josquin's masses. The music is a convenient subject for ear training lessons, counterpoint studies and analytic performance. Since imagination of two-part polyphonic structures is not a presumable ability among students, results of the instructions should always be made audible in the course of the lesson.

**WOLFRAM BODER** (Kassel, Germany)

*Analyzing social structures in opera: the use of Leitmotiv and other dramaturgical techniques in the operas of Louis Spohr*

According to Theodor W. Adorno works of art mirror society and great art does reduce the misuse of ideology to absurdity. In this respect analyzing operas can tell us a lot about the social structures in the period of their composition. This is very clearly the case with the operas of Louis Spohr. Especially the use of *Leitmotiv* often goes so closely parallel with dramaturgical and social structures that such analogies can hardly be seen as a coincidence. For one thing Spohr was a very accurate observer of the politics of his time and he often even tried to interfere. As many examples show, he was especially concerned with structures of power and its misuse. He always insisted on the dignity of the artist as well as the dignity of man in general and fought persistently for the improvement of the social status of musicians.

A closer look on the use of *Leitmotiv* in his operas reveals that this is concerned with exactly the same topics – misuse of power, dignity of man and his endangering by the force of social roles. Spohr's *Leitmotive* are hardly ever used simply as musical symbols for a person or an object. They always tell us something about the role somebody is forced to play or in which he or she is being seen by the other figures on the stage. A detailed analysis of the musical structure and the way in which Spohr makes use of his *Leitmotive* is able to shed light on such analogies between musical and social structures and gives a clear idea of the composer's dramaturgic purposes. The most striking example for such structures is provided by a *Leitmotiv* which I labelled *Maria's theme* in Spohr's last Opera *Die Kreuzfahrer (The Crusaders)*. The analyses given in the paper will show how this musical theme mirrors the ideological straitjacket in which a young nun is to be bound in a convent. Another *Leitmotiv* in this opera, the *Emir's march*, is in itself, simply by musical means, a much more intelligent statement on the often discussed conflict of religions than most of the articles in today's newspapers. In Spohr's opera *Faust* it is often the musical setting itself that reveals the true hierarchy of power on the stage (and in society). In this opera he also makes extended use of *Leitmotive* for the first time. He also uses musical quotations for dramaturgical purposes – a technique that he was to use in other operas as well. Some of the *Leitmotive* in this opera will reappear in later operas. A fact which indicates Spohr's attempt to develop his music towards a universal understanding and which puts him clearly into the philosophical tradition of the late Enlightenment.

In a short introduction the paper will point out the political awareness of Louis Spohr and describe the social structures he was concerned with. The main part will be dedicated to the musical analysis of the *Leitmotive*, their use and the other dramaturgical techniques mentioned above.

*The relation process/sound and the analysis of music involving programmable instrumental systems*

In the field of science, a process is linked to the idea of system. A system is a kind of black box which has different inlets and outlets. A process represents the way in which the inlets are modified to produce the outlets. Every process aims to produce a predictable goal, and is defined by some constraints and rules. The idea of process is applied in automatic control engineering and computer science, but also in biological and natural evolutions.

In music, this notion of process has been particularly applied since the middle of the twentieth century up to now. Like in electronic programmed systems, a musical process is a transformation of all kinds of values. The product of the process runs along the timeline of the concert. For example, a mere cadence in tonal music is a process. The chords follow an evolution. More generally, one needs to consider four levels in this procedural domain. The first one is the process as a theoretical conception, e.g. a particular transformation in serial techniques. The second level is that of the written tracks: the notation of this process on a score. The third is the moment of realization by the interpreter. The fourth and last level is the sound itself, as a recordable trace. In this paper, the result of a process will be the sound.

The previous explanation is based on music written on scores and interpreted with usual instruments. The problem is quite different in the field of electroacoustics. First of all, the very definition of an instrument has to be elaborated and clarified. To this end, the first part of my talk will deal with the definition and the typology of electronic instrumental set-ups since the rise of electroacoustics. The stress will be put on the programmable systems and their ability to memorize and to change their behaviour, depending on the context. The second part of my talk will try to define the differences between an analysis of scores or sound tracks, and an analysis of different kinds of processes. The difficulties appear with programmable instruments with changing behaviour during the concert. The third part of my talk will be focused on the analysis of such systems. This part will aim to determine how to deal with variable instrumental behaviour. Indeed, for the analyst, the idea of considering scores or even sound results as relevant sources is no longer sustainable. The process is contained in part in the instrument itself. An important methodological problem now arises. Finally, I will conclude with a discussion of the importance of this new field for analysis. These sorts of issues feed not only this particular domain, but they could also revitalise analytical theory in general.

*Analysing history, historicizing analysis. A meta-methodological approach in PANEL: Analysis, historiography, and the construction of meaning*

In the past decades, music history and music analysis have often followed distinct paths. This divergence can partly be attributed to the growing influence of scholarly models from the United States, where separate academic curricula for musicology and music theory have been established, each with its own institutions, conferences and journals. Recently, however, there are signs of a rapprochement. This paper intends to contribute to these recent developments by further exploring the relationship between analysis and (music) history from a meta-methodological point of view. Their mutual interdependence will be discussed from two angles ("contextualist" versus "formist"), based on the complementary questions of what history makes possible for analysis, and how analysis can contribute to the writing of a history of music. The discussion will not only focus on the reciprocal possibilities, but also on the difficulties and constraints of this interaction.

The first, "contextualist" approach will distinguish several levels at which historical information can guide music analysis, ranging from the genesis of a composition to the historical, cultural and social relations in which it is embedded. This path from history to analysis nevertheless comes at a crossroads when addressing the formal and aesthetic dimensions of the art work: the more the interpreter is absorbed in the aesthetic idea of a unique composition, the more historical categories tend to disappear and to be substituted by ahistorical modes of thinking. Following on from Dahlhaus' discussion of this problem, a convergence between historical and analytical interpretations implies the ability of reading history in the structure of the composition, of constructing analytical questions on the basis of historical insights and of developing historical consciousness as an integral part of any aesthetic experience.

The second, "formist" approach will investigate how analysis may be fruitful in determining the historical significance and effect of a composition. This path from analysis to history can be obstructed by analytical methods dictated by systematic theoretical concerns. A way of clearing this obstacle is to historicize any analytical approach and to develop specifically historical types of analysis. The search for a single analytical truth thus makes way for a multiplicity of interpretations each demonstrating a specific instance of the unfolding of a composition in historical time.

**JULIANE BRANDES** (Hochschule für Musik Freiburg im Breisgau, Germany)

*Footnote to an "Essay on various Schemata characteristic of Music in the Galant Style"*

During the past decades harmonic-contrapuntal patterns (*Satzmodelle*) in eighteenth century thoroughbass and composition practice were brought into focus of European and American music theory and were thoroughly discussed.

A strong impulse for this special field of interest came from Robert O. Gjerdingen's book *Music in the Galant Style*. In this study various harmonic-contrapuntal patterns implicitly found in galant music and tangible in pedagogical sources of this time are generally introduced, labelled, historically deduced and defined as *Schemata*; these consisting of particular compounds of common features. It is of great importance how these "galant models" are rooted in tradition and how obvious their presence is throughout the borders of different musical periods. Numerous musical examples show in an enlightening way how the schemata function in composition.

It is in Gjerdingen's work that these schemata are generally formulated and explained and it is also shown how significantly the patterns occur in galant music. There is little doubt of the great importance that the "galant models" have especially for analysis and historic composition technique, period performance and improvisation. Nevertheless one question remains considering the fact that the *Schemata* are very generally defined: what makes them sound particularly galant? What makes them components of galant music? How can we find and formulate features helping us to grasp this difficult category of style? How can we also compose and improvise with them in an adequate stylistic way?

In order to answer these questions it is useful to take an experimental practical approach. Firstly, I will show that it is possible to give these schemata different stylistic flavours with the means of musical *Manieren*. I will then concentrate exemplarily on one model: the so called *Romanesca*. As we will see, especially the *veränderliche Vorschläge* (special kinds of suspensions, long appoggiaturas) can be an effective way to give the pattern a galant touch. Furthermore, this musical *Manier* and the options to compose with it will be described and discussed.

Within the "universal dispute" about musical patterns my ideas should be seen as a footnote to Robert Gjerdingen's *Schemata* and provide further practical and pedagogical impulse for historic composition technique (*Historische Satzlehre*).

**ALESSANDRO BRATUS** (Università di Pavia, Italy)

*Too much of nothing, or the space between the two: popular music and composition in Bob Dylan's Basement Tapes*

Through the brief examination of a few relevant cases, the paper underlines two main features of Bob Dylan's *Basement Tapes* from the compositional point of view: first, that the songs composed by Dylan & The Band in Woodstock during 1967 are the product of a thick intertextual web of references that encompass the entire spectrum of American popular and folk song, and second, that these tapes can be seen just as preliminary "sketches" for future commercial recordings by other artists. On the one hand, songs like *Apple suckling tree* or *Clothesline saga (answer to Ode)* show how folk and popular music influences interact in the original Dylan's songs through appropriation and reconfiguration of pre-existing verbal and/or musical traits. On the other hand, the commercial aim behind the realization of these tracks implies an idea of a productive process that necessarily ends in the record, as a cultural artefact defined by certain conceptual coordinates which are comparable with the notion of an autonomous "opus" – especially after the mid-sixties, when Anglo-American popular music began to establish itself as a primarily recorded, not performative, form of artistic expression.

This led to a vision of the compositional work in which oral and written principles (considering the sound recording as a text, thus approachable with analytical tools developed by both musicology and ethnomusicology) are mixed, and a positive conception of popular music as a liminal space where traditional and art music practices blend. Analysis in such a context is a powerful mean to enlighten the factual connections between songs (i.e. motivic, structural, formal, verbal, sonic resemblances in different objects), and to develop new methodologies to deal with a recorded text.

In the final remarks of my presentation, I will use the analytical observations made on the *Basement Tapes* to sketch out some theoretical statements for the definition of the compositional practices in popular music as part of a *continuum*, in which oral and literary modes of musical production and elaboration are complementary, not mutually exclusive. From this point of view, I believe that similar proposals are operating not only in the *Basement Tapes*, but also in other popular music repertoires, outlining tendencies and principles comparable with what happens in different examples and contexts.

*Boxis frorias. An emic/etic analysis of vibrato in singing voices of traditional oral music of Sardinia*  
in PANEL: *Dialogic analysis*

In the studies on the singing voice, the phenomenon of the vibrato has been the subject of several important studies since the 1930s. The majority of the studies on the vibrato are dedicated to classical and trained singers. In the present study, conversely, the topic is the vibrato as an aspect of the art of the *afrorigiamentu* (embellishment, ornamentation) of the voice in different vocal genres of Sardinian oral tradition. The typical "Sardinian vibrato" has different characteristics in comparison with the vibrato generally used in modern classical singing, and it is considered by native singers and experts as an essential and qualifying aspect of a singing voice and, more generally, a major theme in the overall aesthetics of traditional music.

The present study deals with the topic through a perspective which is oriented towards the comparison and the integration between native theories, observations and opinions on the issue expressed by Sardinian singers, and instrumental and statistic analysis of the voices. The research is based on the assumption that the study of musical systems in ethnomusicology requires a dialectic between the so-called emic/etic approach, and that the ethnomusicologist's task is «[t]o grasp concepts that, for other people, are experience-near, and to do so well enough to place them in illuminating connection with experience-distant concepts theorists have fashioned [...]» [Clifford Geertz, *Local Knowledge: Further Essays in Interpretive Anthropology*, 1983, New-York: Basic Books, p. 59].

*Concepts of modal dualism in practice and in theory in 18<sup>th</sup> century Northern Italy*

The concept of modal dualism – the interaction and mutuality of major and minor modes as two opposed yet complementary tonal patterns – became one of the logical and syntactical cornerstones of harmonic tonality. Its main challenge was to explore the major and minor triads and modes as two equivalent facets of the same system, although differing in their degree of consonance, and thus in musical usage and aesthetical implications. I explore this emerging dualistic concept in musical practice and theory of mid-eighteenth century Northern Italy. The music of this period demonstrates fascinating diversity with regard to various options of major-minor pairing and opposition. For example, Antonio Vivaldi's solo cantata *Fonti del pianto* RV 656, despite its plaintive text, is written in a major tonic key. The *dolor* is amplified by shading the tonic B<sub>b</sub> major through the modally contrasted periphery: a shift into the parallel B<sub>b</sub> minor accompanies sorrowful line endings on *piangete tanto* and *sino che in lagrime*; while a D minor cadence at the end of the first vocal period colours *struggasi il cor*; and the supertonic C minor in the B-section is inspired by *al mio dolor*. At the same time, the diatonically closest relative G minor, appears only in auxiliary progressions, always leading to a cadence in either C or D minor. This piece shakes our confidence in the traditional linking of major and minor modes to the "happy-sad" emotional centres. Moreover, it shows that Vivaldi and his contemporaries, in their propensity to modal contrasts, were embracing the hexachordal (I-ii), mediant (I-iii) and parallel (I-i) relationships with more enthusiasm than the relative relationship (I-vi), commonly believed to be the preferred form of modal contrast in eighteenth century music.

My paper aims to combine analysis of both musical works and concurrent historical theories in order to prove that several methods of modal pairing coexisted and were conceived as equally valid. Musical works and theoretical writings of North-Italians concentrated around Basilica Antoniana in Padua in the 1720-50s (Francesco Antonio Calegari, Francesco Antonio Vallotti, Giuseppe Tartini, Giordano Riccati and Alessandro Barca), display this fascinating pluralism of the dualistic concepts. Their concepts of *tuoni armoniali* (major and minor modes) put special emphasis on the following issues: 1) the polarity of major and minor thirds within the context of unequal temperament (specifically unequal thirds); 2) different notions relating to pairing and binary oppositions; 3) the expressive and technical aspects of modal polarity.

I offer a hermeneutic approach to their theories of modal dualism by addressing: 1) their idea of music as *armonia fisico-matematica*, where the grounding of any musical system is represented by the unity of physical and mathematical principles; 2) their research methods as compared to those established by the Venetian Enlightenment.

The broad variety of approaches attempted by Paduan theorists to explain the major-minor dichotomy within a single system, witnesses a clash between the natural phenomena itself, its exegesis, and the musical practice of the time. My ultimate aim is to show the conceptual unity of the major-minor modal polarity within its practical and theoretical exploration.

**MATTHEW BROWN** (Eastman School of Music, Rochester, United States),

**JOHN KOSLOVSKY** (Conservatorium van Amsterdam, Netherlands)

*History and tonal coherence in Debussy's La fille aux cheveux de lin and Bruyères*

Debussy and Schenker: at first sight it is hard to imagine a more incongruous pair of names. Debussy is famous for scorning musical analysis and denouncing accepted notions of chord function; Schenker was outspoken in his condemnation of Debussy's music. Schenker declared that Impressionist music was valuable «as an acoustic phenomenon, but certainly not as art,» and insisted that Debussy's finest achievements pale beside the simplest minuet by Haydn. Despite their seemingly incompatible views, however, Debussy and Schenker both had a great reverence for counterpoint and harmonic context – core principles in Schenkerian theory.

But while Schenker would never have used his approach to understand Debussy's music, two of his disciples did: Adele Katz and Felix Salzer. Writing some ten- to fifteen years after Schenker's death, Katz and Salzer firmly believed that many of Schenker's ideas could explain Debussy's tonal procedures and also shed light on the composer's place in history. This they did, however, by altering many of Schenker's central ideas about the nature of tonality. At the same time, Katz and Salzer also set out to challenge prevailing views of the composer, both modernist (René Lenormand and Leonid Sabaniev) and traditional (Nadia Boulanger).

In this paper we take a close look at two of Debussy's more traditional preludes: *La fille aux cheveux de lin* (*Préludes*, Bk. 1), analysed by Katz in her 1945 monograph *Challenge to Musical Tradition*; and *Bruyères* (*Préludes*, Bk. 2), analysed by Salzer in his 1952 textbook *Structural Hearing*. We will put Katz's and Salzer's work into context, examine their respective graphs of these preludes, and provide our own alternative analyses.

In contrast to Katz and Salzer, we offer a more traditional explanation of both pieces, with complete descending linear progressions and harmonic support. Our analyses will also show how many of Debussy's procedures – such as the avoidance of the tonic at moments of closure, pentatonicism, and extended harmonies – can be explained with traditional Schenkerian theory, and yet still illustrate his place in the history of tonality.

**LUCA BRUNO** (Conservatorio di Musica "San Pietro a Majella", Napoli, Italy)

*Music analysis and performance: creating an interpretation of Igor Stravinsky's Piano Sonata (1924), first movement*

Recent researches on music analysis and semiotics have newly focused on an old theme: the relationship between performance and interpretation of music. In my paper, I would like to explore this theme as linked to my performing activity.

In detailing the musical choices explored while preparing a performance of the first movement in Stravinsky's Piano Sonata (1924), I will adopt the listening methodology devised by Mario Baroni in *L'orecchio intelligente* (2004). In this remarkable book, Baroni explores the possibilities for non-learned listeners to approach non-familiar music in three steps: the intuition of the affective content evoked by the musical event; an analysis of its sonic organization; and the interpretation of these data supported by an inquiry on their cultural coordinates.

I believe that Baroni's methodology could also be fruitfully employed by a particular category of listener and interpreter of music, the performer-analyst, since a performer should embody what perceives as determinant in a musical communication, through a stylistic analysis by ear, body, and mind. The final goal is a creative synthesis: the performance. To better explore these premises, I believe that Stravinsky's music can be particularly revealing.

Stravinsky's Piano Sonata may be considered an experiment in Neoclassicism. However, achievements in music analysis have eliminated the rigid division of his production in Russian, Neoclassical, and Serial periods, highlighting the substantial persistence of personal stylistic marks over his entire career. Those aspects of corporeality, addressed in several communications describing his habit of manipulating the sonic material before the actual compositional work, should make his music an elective choice for any performer. His description of the use of fingers on a piano keyboard in searching for intervals as creative stimuli certainly represents an attractive "call note" for a pianist.

In analyzing Stravinsky's Sonata, I will point out how the interaction with materials derived from Beethoven's op. 54, *Diabelli Variations* op. 120, and Bach's and Haydn's contrapuntal techniques – indicated by the composer as pre-compositional models for this work – transformed both the unfolding of the sonata-form and the tonal organization of Stravinsky's language. To this purpose, I will compare several analytical contributions: Arthur Berger's, Joseph Straus's, Pieter van den Toorn's, and Richard Taruskin's methods focusing on tonal "centricity" and the interaction of pitch-class structures derived from the octatonic system; and Edward T. Cone's and Barry M. Williams's studies addressing the articulation of musical form through the proportional organization of time. I will then discuss how I intend to perform Stravinsky's experiment in musical structure and form, acknowledging my own intuition of its content.

**DAVID BURN, GRANTLEY MCDONALD** (Katholieke Universiteit Leuven, Belgium)

*Canons and crosses: Leonhard Paminger's Vexilla regis prodeunt and Tua cruce triumphamus*  
in PANEL: *Analysis, historiography, and the construction of meaning*

In the sixteenth century, the analysis of musical works was still in its infancy. In early analysts like Joachim Burmeister (*Musica poetica*, 1606), the conceptual framework and vocabulary of musical analysis in the late Renaissance still depended on non-musical models such literary analysis [Bartel 1997]. This is due to several causes. Firstly, early analysts did not yet possess a sufficiently refined vocabulary to analyse and describe music, and had to resort to familiar and better-developed analytical languages such as rhetoric. Moreover, many sixteenth-century composers sought to integrate wider cultural or intellectual elements into the compositional process. In attempting to understand the structure of particular pieces, analysis of sixteenth-century music thus ought ideally not simply to consider the music in isolation, but should seek to identify connexions with the historical and cultural context [Loesch 2001].

Accordingly, this paper analyses a pair of canons by the Passau composer, poet, and theologian Leonhard Paminger: the Passontide hymn *Vexilla regis prodeunt* and the Passontide antiphon *Tua cruce triumphamus*. Both pieces are notated in the shape of a cross, and are printed on opposite sides of the same sheet in the second volume of Paminger's works (1573, posth.). This arrangement was not chosen for merely visual reasons. The cross notation relates to the form of the pieces, for the two axes of each piece contain double *cancrizans* canons. Building on the work of Christian Meyer, who has argued that Hrabanus Maurus' *De laudibus sanctae crucis* determined such basic compositional aspects as the number of notes in *Vexilla regis* [Meyer 1997], this paper reaches further into the theological background of the pieces, notably into the writings of Luther, whose "Theology of the Cross" paradoxically inverts the expectations of scholastic theology [McGrath 1985; Leaver 2007]. Reference is also made to a pair of epitaphs written on the death of Luther by Leonhard Paminger's son Sophonias, copied into a book presented to Leonhard by Luther himself. These poems emphasize the element of inversion so typical of Luther's Theology of the Cross: both poems contain the reverse acrostic *Martinus Lutherus dei miles* (*Martin Luther, soldier of God*); furthermore, the arrangement of the acrostics in each poem is a mirror image of the other. Further visual and musical analogies to Paminger's canons can be found, for example *Crux fidelis*, a similar double retrograde canon by Ludwig Senfl.

The session will thus seek to present a multi-layered interpretation of these pieces in which a dialogue between the analysis of musical structures; relationships between the two pieces and others of a similar type; and visual, theological, and poetic analogies taking their inspiration from early analytical strategies, reveals something of what Paminger's canonic twins may have signified to their composer and recipients.

**DEBORAH BURTON** (Boston University College of Fine Arts, United States)

*Ariadne's threads: Puccini and cinema*

Unlike many of his contemporaries, such as Giordano, Mascagni and Romberg, and despite being a cinephile who had received offers to write for films, Puccini never wrote or arranged his music for the cinema. Yet perhaps in a way he did. Or rather, Puccini's operatic scores have "cinematic" qualities that not only make them useful for soundtracks, but can also usurp narrative functions now usually carried out by filmic techniques, such as dissolves, fade-ins, fade-outs and superimpositions, to indicate the nature of spatial and temporal relationships with which to carry forward the narrative thread. Noël Burch labels these filmic codes "Institutional Modes of Representation" (IMR), as opposed to the primitive modes (PMR) of earlier film.

The term "Ariadne's thread" can be used to denote a problem-solving system, in which logical steps are exhaustively applied to systematically explore all possible alternatives or routes, backtracking when necessary. Many scholars who have explored the nature of film music often seem to practice an Ariadne-like, step-by-step search.

This article, building upon the work of Leukel and Leydon, follows the thread of the intimate and intricate relationship between late 19th- and early 20th-century Italian operatic compositional trends and the birth of cinema during the same period, hypothesizing musical "cognates" of cinematic techniques in Puccini's music. Finally, it explores, through the writings of Adorno, Eisler and others, the narrative functions of film music and the operatic score.

*Giacinto Scelsi and the “behavioural revolution”: the relationship between improvisation and composition from a philological perspective (with examples from Hymnos)*

Analysing Scelsi's music involves confrontation with two technical aspects inseparable from his theoretical thought; they have important consequences on the methodological level. On the one hand his pieces are often based on a continuous and slow transformation of a single note, to the extent that it becomes a real formal principle; on the other hand, Scelsi creates the microtonal fluctuations through his *ondiola* improvisations that are recorded on the tape and then transcribed in paper for instruments. These improvisations prove that during the initial phases of the birth of a piece the composer considered the traditional notation not always fit to express perfectly the musical thought.

Although Scelsi's idea about the notation and the solutions he adopted come from non-common premises (e.g. the concept of impermanence that echoes throughout his writings), his position on musical notation is one of the most extreme manifestation of a central question during the second half of the twentieth century. The introduction of new concepts (e.g. level of tension) or organizational principles (e.g. the groups) in the musical area leads a lot of composers to search during the first stages of the compositional process non-conventional systems in order to note a musical/sound idea. In this sense, the lines like the outline of a mountain drawn by Stockhausen (in order to “note” what will be the specific course of the sounds in some sections of *Gruppen*) or the Cartesian axes used by Maderna during the composition *Hyperion* are good examples. Despite being non-conventionally written, these pre-compositional materials are musical sketches because they contain some fundamental information for the pieces. In this perspective, the *ondiola* improvisations by Scelsi are borderline cases: they are “noted” on a non-traditional support but, at the same time, they have some characteristics of the paper sketches.

My paper is focused on the analysis of some excerpts from the tapes of *Hymnos* (1963, for two orchestras and organ) and on a comparison to the corresponding bars of the score. This comparison demonstrates how some “timbral” changes of a single note “tested” during the *ondiola* improvisations anticipate important formal elements of the piece; besides, a short “melodic” fragment played on the *ondiola* is then used in a strategic point of *Hymnos*, although modified. This proves that the *ondiola* improvisations are sketches: Scelsi “notes” some organizational ideas in view of a subsequent elaboration and an instrumental transcription. His *modus operandi* reveals an authentic “behavioural revolution”, because it brings the supremacy of the paper sketches into question and shows the importance to reconsider the relationship between improvisation and composition.

*Schenkerian Ursatz and temporal meaning in Chopin's Prelude op. 28, n. 5*

Temporality is one of the features that contribute to make Chopin's Preludes op. 28, as Charles Rosen once defined them, the most radical experiment in the context of the romantic aesthetic of the fragment. With their duration ranging from 30 second to 4/5 minutes, they represent a challenge to the listener's experience. Certainly their temporality is embedded in the prelude as a genre of functional music, i.e. short piece used to introduce a longer piece; however, in less “controversial” compositions, a prelude presents a clearly defined trajectory with a rather stable opening moving towards either a strong ending gesture, which announces the beginning of the piece to follow, or leaves the trajectory suspended, to be concluded on the following piece; all features, though, that Chopin puts constantly in question in his Preludes.

Among the Preludes op. 28, the experience offered by the Prelude n. 5 in D major is particularly striking for, as Jeffrey Kresky states «A continual mixing of the modes pervades this brief piece, making ambiguous its emotional slant. Tiny details blend the openness of major with the darker, more closed seriousness of minor.» The listening experience is further complicated by the rapid harmonic turnover (in several sections up to three times per measure), the very quick key leap emphasised by the transposition of small segments of music, and a very multifarious and thick surface from which it is not easy to distinguish a sense of melody to the same extent as it is possible in the previous preludes [Kresky 1994].

The aim of this paper is to explore the features of the Prelude as an interplay between its formal components the temporal meanings which can be attached to the various steps of a Schenkerian *Ursatz*.

Schenker's view of music is temporal from its roots. The only static entity in his analytical system is the chord of nature, and from the first prolongation, analytical moves are unintelligible without a sense of time. For instance, arpeggiation transforms the chord of nature into a succession. The *Urlinie* is a goal-directed succession that begins on a consonant note (say  $\hat{3}$ ), moves through a dissonant note ( $\hat{2}$ ), and ends in final closure on the most consonant note of all ( $\hat{1}$ ).

In the arrow of time determined by the *Urlinie*, we might say that the temporal function of  $\hat{3}$  is that of beginning, of  $\hat{2}$  that of middle (leading to the end), and  $\hat{1}$  of the end. A reordering of  $\hat{3}-\hat{2}-\hat{1}$ , of course, is not possible. However, as I will try to explore in my analysis with the help of Jonathan Kramer's and Judy Lochhead's concepts of temporal functions, Chopin's Prelude op. 28, n. 5 puts into question the temporal meanings of the steps of the *Urlinie* and creates conflicts among them. Whilst highlighting the specific temporal experience of the Prelude op. 28, n. 5, this analysis will also be the springboard for a possible reading of the temporal experience embodied by the entire op. 28 set and its relation to the prelude as a genre.

Gérard Grisey participated to the artists' committee of *Lltinéraire*, an ensemble founded by Tristan Murail in Paris during 1970s. The ensemble's guiding principle was the search for a natural expression of sound, wherein the sound itself – in its various acoustical properties – would be the driving element of the composition. After his 1979 article *Musique Spectrale*, (in H. Dufourt, *Musique, Pouvoir, Écriture*, Paris, 1991), musicologists adopted Hugues Dufourt's term "spectral music" to denote the work of Grisey, Murail and others.

There are relatively few articles and books, particularly in English, on the topic of spectral music. Among these, most are concerned with aspects of harmony and timbre. Murail's short (5 pages) but dense article *After Thoughts* contains extensive discussion of the concept of harmony and timbre in relation to form and process in his music; François Rose's *Introduction to the Pitch Organization of French Spectral Music* gives an overview of basic concept and compositional technique in terms of the timbral aspect of spectral music. Rose provides a detailed explanation of concepts such as harmonicity/inharmonicity, and techniques for creating inharmonicity such as frequency modulation, ring modulation etc. Musical time and temporality, on the other hand, have been largely excluded from these discussions. Those few texts that do deal with time and temporality in Grisey's music do so only sporadically or in brief, including Ingrid Pustjanac's *Un esempio di «squelette du temps»: aspetti ritmici in Le temps et l'écume di Gérard Grisey* [in *Mitteilungen der Paul Sacher Stiftung* 17, 2004] and Jérôme Baillet's *Gérard Grisey: Fondements d'une écriture* [Paris, 2000].

This paper calls attention to the temporality of spectral music, and to propose that the significant elements of spectral music are not only spectrum and timbre, but also temporality. Among spectral composers, Grisey takes a particular interest in the temporal domain, saying, «For me, spectral music has a temporal origin.» [in G. Grisey-J. Fineberg, *Did You Say Spectral*, in *Contemporary Music Review* 19/3, 2000]. The temporal process that underlies the evolution of sound in spectral composition emerges as an important component of compositional strategy in Grisey's music.

I will illuminate the notion of process in Grisey's music by focusing on how temporality/rhythmic elements evolve over time. I first, examine those concepts and elements derived from electronic music, which Grisey applies to his works, for instance, time stretching and the use of beatings in *Partiels*. Excerpts of *Partiels* and *Jour, Contre Jour*, demonstrate two different types of processes in Grisey's early works. Finally, an analysis of *Tempus ex machina* written for six unpitched percussion instruments centres on the process of temporal and rhythmic transformation in that work.

The influence of Japanese aesthetics on Western visual arts has long been noted and widely discussed in scholarly circles, but the question as to how Japanese aesthetics may have informed Western art music is much less explored. While a number of French composers of art music, most notably Claude Debussy, are known for their admiration of Japanese artistry, Olivier Messiaen (1908–92) remains a special case in that he meticulously studied Japanese traditional music and composed music that drew on his ornithological research of Japanese birdsongs.

Among Messiaen's musical output, *Sept Haïkai*, composed in 1962 after his first visit to Japan, is the most pronounced celebration of his experience of Japan in sonic terms. *Sept Haïkai* tells of a marvellously rich Japanese influence, and Messiaen makes no secret about the fact that he had composed *Gagaku*, the centerpiece of *Sept Haïkai*, with close reference to the Japanese model that bears the same name.

Although Messiaen's decision to appropriate the Japanese gagaku forges a close parallel to Vincent van Gogh's stylish remaking of the colour woodcuts of Andō Hiroshige's *100 Views of Famous Places in Edo*, Messiaen's appropriation is of a more sophisticated order in that he transformed the model by reading into the paradigm timbral and textural elements that are characteristic of his own music. Through a comparative study of Messiaen's *Gagaku* and the Japanese gagaku, this paper explores how Messiaen approached timbre and texture as sound-colour by delving into their shared and conflicting aesthetics.

Within the course of its history, musical analysis developed a great number of representations with little interest on the principles and aims of representing. Representation in music is facing a double difficulty: the temporal nature of this art, and the fact that acoustic phenomena are nearly impossible to see. Nevertheless, most of the representations used by musical analysis, and first of all musical notation itself, deal with visual space. Despite of that, the representations of music used for analysis are far from being of the same nature. They can be symbolic, graphic or even, more recently, animated figures on multimedia support. How does the transfer from the sonic domain to its representation operate? This is a great question. But it underlies another one, dealing with the problematic nature of representation. Music is a phenomenon implying the presence of several subjects through what is usually considered an object, even if this word is particularly unclear concerning music. This means that musical representation cannot avoid having a mental aspect, dealing with psychological and socio-cultural matters. How can musical analysis account for that aspect? Furthermore, any representation of a phenomenon induces probably a modification in our way of perceiving it. Representation is then as much a testimony on reality as a way to filter or even to deform it.

Even if it seems difficult to avoid a typology of the traditional representations used in the field of musical analysis, a special emphasis will be placed on the recent evolution (or introduction) of some new ways of representing music. Topologic problems aroused from generalisation of Euler's nets will be particularly emphasised, as they are prototypic of what we will call *representational spaces*. Harmonic organisation suggests a multiplicity of distances, and then a competition within different kind of representations which can take into account different aspects of musical organisation. In this idea, one cannot find the best representation, but a representation more appropriate to show certain properties. The variety of possible *tonnetz*, and their ability to show important aspects of harmonic and melodic systems will be demonstrated.

But representation of music cannot consist only of a "map" of relations between predefined concepts called "notes". One of the main topics about music representation is the way it is able to deal with the "dynamics" aspects of the phenomenon, that is to say with its temporal behaviour. One of the more evident ways to comply this goal is to represent a trajectory in the representational spaces already mentioned. This idea can lead to a generalisation of the concept of "phases spaces" initiated by Poincaré. The equivalence of phase space representation and structural grammar is a very important result, as it means there is continuity in between physical and symbolic representation. It is also important to understand how this overall conception of representation can be realised from the acoustic signal itself. The concept of DFT (Differential Fourier Transform) is then very important as well as a conception of representations as projections of an overall scheme implying representational space, time and variation space.

The issues raised by analysing music of non-Western oral traditions may not in principle be significantly different from those of analysing Western notated music – except that the degree of self-reflexivity needed around questions of how and why one pursues musical analysis is raised to a point where it cannot be kept in the background. Even while North Indian classical music might seem susceptible to analytical approaches more usually applied to (notated) Western music, it might simultaneously remonstrate against them on ethical and methodological grounds. But to place an embargo on dialogue between different cultures of scholarship and practice would be equally unethical – and anachronistic, given the already productive relationship that Indian music has developed with the West, reflected in an emerging body of analytical studies. Some of these are more abstract and/or positivist – such as theoretical studies by Chakraborty et al. [A Statistical Analysis of Raga Ahir Bhairav, in *The Journal of Music and Meaning* 2009, 8/4]; Chandrasakeran et al. [Spectral Analysis of Indian Musical Notes, in *Indian Journal of Traditional Knowledge* 2005, 4/2], and Cooper [Abstract Structure and the Indian Raga System, in *Ethnomusicology* 1977, 21/1] – the approaches being not unrelated to the more systematising tendencies of Indian music theory or a longstanding connection in Indian thought between music, sound and language. On the other hand, a number of recent works – e.g. Clayton, *Time in Indian Music: Rhythm, Metre, and Form in North Indian Rag Performance*, Oxford 2000; *Towards an Ethnomusicology of Sound Experience*, in H. Stobart, *The New (Ethno)musicologies*, Lanham 2008; Qureshi, *Sufi Music of India and Pakistan: Sound, Context, and Meaning in Qawwali*, Cambridge 1986; Sanyal and Widdess, *Dhrupad: Tradition and Performance in Indian Music*, Ashgate 2004; Wade 1997 – have developed productive approaches to analysis through investigating the particularities of performance, often in collaboration or dialogue with professional practitioners. How can one build on these approaches? My own offering in this presentation will be to re-visit the question of what constitute the conditions of possibility for the analysis of Indian classical music. What is clearly essential to this music is its improvisatory nature. This means not only freedom from following a pre-notated path but also, more radically, resistance by the performer to textualisation: with only certain specific exceptions, the performer is not meant to repeat material, but rather consistently to vary it, so that it remains in a constant state of fluidity. This, then, presents a paradox for the would-be analyst, since his or her tools are always in some way notational, and therefore liable to reify the music being studied into a static object.

One solution might be to conceptualise analysis as charting the phenomenology of performance – an empathising with the situation of the performer in the moment of forming his or her musical materials. The role of analysis here would be to represent this process more formally, and I will concentrate in my paper on melodic formation in the *khyāl* style of Hindustani vocal music, drawing on my experience as both a student of this practice and a professional analyst of Western music.

The technical achievements of *Rope* (1948), Hitchcock's first full-length colour film that appears to be shot in one continuous scene, have overshadowed its filmic content. In an interview with François Truffaut in 1962, Hitchcock himself said of the film's significance, «I undertook *Rope* as a stunt; that's the only way I can describe it. I really don't know how I came to indulge in it» [Truffaut 1983].

Based on Patrick Hamilton's play *Rope* (1924), which was inspired by the real-life murder of a Chicago teen by Leopold and Loeb, two University of Chicago students who murdered simply to see if they could get away with it, the filmic action follows the daily events of a macabre dinner party, where the guest of honour lies dead in a trunk. My paper explores the dramatic employment of music in the film, in particular Phillip Morgan's (played by Farley Granger) on-screen performance of Francis Poulenc's *Mouvement Perpétuels* (1918).

My reading focuses on one scene in particular, one in which Phillip, at the piano, is cross-examined by his ex-school teacher, Rupert Cadell (played by James Stewart). Adhering closely to Claudia Gorbman's approach to studying film music in her groundbreaking text, *Unheard Melodies* (1987), I interpret the "cat-and-mouse" interrogation scene with three codes in mind: 1) "Pure" musical codes, with an emphasis on fragmented texture and discordant bitonality between the left hand and the right hand of the pianist; 2) "Cultural" musical codes that considers why and how Poulenc's music is appropriate for the film; and 3) "Cinematic" musical codes that directly considers the "anchorage" in which the music relates to the filmic narrative. In the case of the cat-and-mouse scene, Phillip's on-screen musical performance ultimately foreshadows his capture by the police.

Making sound is characteristic of agency in the natural world. It is curious therefore that having separated pitched sound from nature as much as possible – disciplined it into scales, temperaments, etc. – Western music has for centuries made extraordinary efforts to imitate natural sounds and processes with this unnatural sound. While music often depicts the Natural, "music" has become apparently naturalized and transparent [Tomlinson 1999, p. 344], and musical sounds themselves have become, in Marion Guck's term, music-literal [Guck 1997, p. 203]. Their metaphorical connections with extra-musical sounds are suppressed in discourse about music because they constitute "effects."

This paper analyses the first movement of George Crumb's *Ancient Voices of Children* as an expression of agency in the soundscape rather than imitation of natural sounds for illustrative purposes, and invites us to hear this music – and other musics in which we hear references to the Natural – enacting an ecology of human and non-human, implicitly asserting that the relation is musical, or better, that music in general is ecological.

**KLAAS COULEMBIER** (Katholieke Universiteit Leuven, Belgium)

*How much theory does music analysis need? The case of Claus-Steffen Mahnkopf*  
in PANEL: Analysis, historiography, and the construction of meaning

In his 1969 lecture *Zum Problem der musikalischen Analyse*, Theodor W. Adorno suggested that the analysis of a composition should bring out the relationships between specifically musical elements and more general contextual ones [Adorno 1982]. However, this dialectical approach appears to be rather problematic when applied to the analysis of contemporary music. Due to a limited "historical distance", contextual elements are not yet crystallized as clearly as they are for earlier repertoires. Furthermore, since the disappearance of the tonal syntax as a common ground for Western art music, there is no longer a universal grammar providing a criterion by which two compositions can be weighed against each other. Instead, each composer creates his own musical material and technique, which is often even reinvented for each new composition.

More than once, a contemporary music composer presents him- or herself also as a writer, philosopher or music historian. He or she thus already positions his or her own work (implicitly or explicitly) within a larger (music) historical context. In his theoretical writings, Claus-Steffen Mahnkopf provides a modernist approach to music history, with a main line of development from Beethoven over Schönberg to Ferneyhough. By reading his texts, it becomes clear that he, as a composer, also sees himself as a representative and explicit advocate of this modernist line of thought. In addition to theoretical reflections, Mahnkopf also presents analyses of his own music. He developed a Theory of Polyphony, distinguishing between different levels of polyphony, with the poly-work as a culmination point [Mahnkopf 2002a]. In his analyses, Mahnkopf provides a basic insight in the composition process and makes clear how his theory is translated into music [Mahnkopf 2002b, 2008].

In this paper I will present some important themes of Mahnkopf's theoretical discourse, and consider the question of how much theory music analysis can bear. Therefore I will confront Mahnkopf's Theory of Polyphony with our own analyses of two major poly-works composed 10 years apart. *Medusa* was written between 1990 and 1992, while *Hommage à György Kurtág* was composed around the year 2000. In Mahnkopf's case, music and theory could easily form a closed world, with the theory legitimating the music, or vice versa. Our aim is to analyse Mahnkopf's music from a broader perspective, not restricted to the frame of his own theoretical concepts. More specifically, I will approach Mahnkopf's music with a focus on the (multi-)temporal organization as a very open and general point of departure. This approach can perhaps provide opportunities to find convergences between other composers as well, outside the borders of certain techniques, systems, or even aesthetics. In this way, I try to meet Adorno's request for a musical analysis that is substantiated by the (historical) context.

**LUISA CURINGA** (Conservatorio di Musica "G. B. Pergolesi", Fermo, Italy)

*Breathing, interpretation and analysis in the Allemande from J. S. Bach's Partita BWV 1030 for solo flute*

The "musical breathing" has a primary role in phrasing and in emphasizing the salient moments of harmony, melody and form; so, it is an important expressive medium for all performers. However, wind players and singers are constantly required to balance the physiological need to breathe with that of having a good musical phrasing. They try carefully to find a difficult equilibrium: an inappropriate breath can seriously compromise, if not completely spoil, the flow of the musical pace.

What happens when the physiological breathing and the musical are in conflict? To which resources is the player forced to resort to? Which effect do his/her breathing choices have in the process of hearing and perceiving the composition? The aim of this paper is to deal with this subject, barely tackled by the analysts: the close relationship between the formal, harmonic, melodic interpretation and the position of breaths. To this end, I will use an emblematic piece: the *Allemande* from J. S. Bach's *Partita* BWV 1013 for solo flute.

Rhythmically, this *Allemande* consists of a continuous series of semiquavers, a sort of perpetual motion. Strictly speaking, except for the end of the first part, there are no appropriate musical moments to breathe. Nevertheless, several physiological breaths are absolutely necessary. Therefore, the performer must decide where to place them as well as their length. Moreover, the player has to "prepare" the transition before and after the breaths, by means of suitable performing devices, such as timbre variations, sustained notes, *incalzando*, *rallentando*, *crescendo*, *diminuendo*. The aim is to give a musical sense also to the less opportune breaths, in order to preserve the impression of a flowing, circular and continuous movement. The player, in this case, analyses the piece, more or less consciously; in fact, s/he makes a segmentation that has a strong influence on the audience's perception.

Considering the historical-analytical literature and the harmonic analysis of the *Allemande* I will show, also with live examples on the flute, some possible breathing choices, which can deeply change the interpretative configuration. The placement of the breath, in fact, stresses particular chords or harmonic successions; in agogic terms, it suggests a very personal and variable flow of tension and relaxation. The resulting alternation between moments of continuity and discontinuity creates potentially new readings of the piece. The extraordinary variety of performances and the attention of many analysts on this enigmatic piece, provide proof of it. Among others, an interesting hypothesis [Bang Mather-Sadilek 2004] claims that this *Allemande* follows a psalmodic structure. This rhetorically connotated structure, together with the particular pronunciation of the baroque flute technique, permits a fresh reading of the performing problems connected to breathing and segmentation; besides, it suggests a kind of breathing close to the one exploited in acting.

The musical experience from the second half of the nineteenth century onwards has been investigated from various points of view: acoustic and psychoacoustic (Helmholtz, Stumpf), aesthetic (Dahlhaus), sociological (Adorno). In the 80s of last century some trends in musicology have pointed out that the musical experience is highly intertwined with contextual, social, and historical dimensions. To mention a relevant case, the semiotic paradigm, imported in theoretical musicology by J. J. Nattiez, considered the musical object from the perspective of composition (the so-called "poietic level"), from that of audience (the "reception level"), adding an intermediate level (the "neutral level") to take account of structural properties highlighted by the analytical investigation. Clearly, this paradigm emphasizes the role of the perspective in the cognition and interpretation of the musical datum, strongly constrained by historical-pragmatic factors. But nowadays we do not yet have an approach to musical perception solidly based and strictly related to theories or methodologies of musical analysis.

In this paper I propose some considerations on the role of music analysis in the study of musical perception. Generally, the aim of music analysis is conceived to be the retrieval of structural relations at different structural levels of a composition (from deep levels to surface ones). Thus, one may wonder which is the meaning of these relations in the cognition and perception of music. I argue for three possible cognitive interpretations for structures recovered by the analytical process. In other words, I suggest a kind of classification based on the cognitive functions of structural patterns, but at a purely theoretical level: this is a conceptual frame to be tested in experimental investigations.

- 1) A structural pattern can be directly caught in the process of hearing. Patterns of this type, detectable through the normal processes of pattern recognition, are involved in the formal articulation at local levels.
- 2) A structural pattern, although hard to identify perceptively, can be relevant in the appraisal of the syntactic coherence of long-lasting musical sections. Such a cognitive role can be assigned to patterns of deep levels in the Schenkerian analysis or to abstract (and often minimal) motivic patterns in the motivic-thematic analysis.
- 3) Finally, there are patterns recovered by the analytical process that hardly could play a role in the musical cognition. These patterns reveal structural features of music that you can discover only by means of analysis. These features are objective, inasmuch as they are found by means of an intersubjective research method, but they have no relevance in the musical cognition based on hearing.

This sketch of a typology of the cognitive role of musical structural patterns will be illustrated with the help of examples.

My presentation will address issues concerning the analysis of "open" forms in electroacoustic music. The work to be considered is *Scambi* (1957) by the Belgian composer Henri Pousseur.

"Open" forms present many challenges to the analysis of contemporary music. Either the analyst examines and evaluates various realizations of an "open" composition in order to assess the relative merits of each version. Or the score is subjected to a critical enquiry to contextualize its potential within the broader framework of post-war music theory. Both approaches are valid. The problems, however, are exacerbated when analysing electroacoustic works which frequently have neither scores in the traditional sense, nor detailed documentation of their realization processes. The analysis of "open" electroacoustic compositions could be ignored due to the (convenient) scarcity of such works. *Scambi* is an exception and thus deserves our attention. It is "open" in conception and electroacoustic with regard to its sound materials (32 sections of filtered white noise). My analysis of this work will seek to identify the problems (one might even claim, the contradictions) encountered by Pousseur in seeking to unite "openness" (to which he was committed) and studio composition. I hope to demonstrate that *Scambi* represents an early example of a compositional "environment" that is familiar to many musicians today and will demonstrate that technology can be used to explore the potential of the "open" works from both the post-war and contemporary periods.

My methodology will be based on two strategies. First, I shall examine critically Pousseur's "instructions" from various sources. This close reading will reveal the underlying relationship between the compositional methods and the technical resources at his disposal. A shift can be identified from the highly deterministic use of studio equipment (such as in Stockhausen's *Studie I*) to Pousseur's real-time "improvisations" at the RAI studio. Second, I shall examine the actual constitution of the filtered white noise. This examination will be undertaken aurally and using spectral analysis. An underlying subtext in *Scambi* is the rehabilitation of noise as musical material. Pousseur demonstrated that noise was no longer a single undifferentiated category. Technological mediation gave access to a wide variety of sound materials ranging from groups of impulses to masses of various, internally fluctuating densities. Pousseur described both his noise material and his work methods as "organic". However, my analysis will illustrate the tension between an organic material and a constructivist method that is clearly non-organic. I will identify a disparity between micro- and macro-levels which can also be applied to analyses of aforementioned algorithmic works. The relevance of *Scambi*, therefore, is not restricted to its specific historical situation.

The piece can be interpreted as participating in three different musical genres:

- as a piece of descriptive/narrative music, without any officially recognised formal scheme;
- as a March similar to the form A B A
- as a Sonata with thematic-tonal dialectic between two principal themes.

Several considerations speak for and against each of the three possibilities, and moreover none of the three can be related to a precise model. The analysis of the historical sources and that of the score (as it is published in the *Neue Liszt Ausgabe*, I/9, pp. 75-83) will hopefully solve the problem.

This is a "case study" in a long tradition of studies on similar problems: Dahlhaus found hints of sonata-form in the first movement of the *Faust-Symphonie* [Dahlhaus 1979], and after him researchers uphold the existence of the same formal structure in five of the Symphonic Poems: *Hamlet*, *Tasso*, *Prometheus*, *Orpheus*, *Les Préludes*, all of them (if excluded the first one) written originally as Ouvertures [Kaplan 1984].

*Funérailles*, the seventh piece of the cycle *Harmonies poétiques et religieuses*, seems to have long been on Liszt's mind, from the 1830s up to the Weimar years in the 1850s. In a seminal essay Adrienne Kaczmarczyk illustrated the genesis of the piece and its connections with other works related with Hungarian themes (*Symphonie révolutionnaire*, *Magyar Dalokl I* and *X*) and with the ideas of two very influential figures such as Adam Mickiewics and Félicité de Lamennais [Kaczmarczyk 1993-94]. But the article's aim was not to illustrate the form of the piece. This will be the job of the present paper.

I'll first comment upon the (rare) contemporary evidence on this piece:

- a passage in a letter by Liszt to the Princess Wittgenstein [La Mara 1895, p. 266];
- memories of the first important Liszt's biographers Lina Ramann [Ramann 1901, II, p. 3], and August Göllerich [Jerger 1975, p. 71];
- a sketch of the *pesante* bass theme (bars 24-40) survived on p. 19 of a sketchbook kept in the Weimar Archives and called *Ce qu'on entend* sketchbook (WRgs N1).

Then I'll conduct my analysis of the form of this piece mainly on the base of two analytical methods:

- following Willian E. Caplin suggestions, I'll try to find out what are the formal functions of every "part" of the piece. The distinction/segmentation in parts will be done on the base of the general principle of continuity/discontinuity of all musical parameters. The aim of this type of analysis is to «understanding form in relation to musical time» [Caplin 2008, p. 40].
- keeping in mind James Hepokoski's theory [Hepokoski 2008], I'll try to reconstruct a processual dialogue between Liszt's *Funérailles* and other similar pieces (or sections thereof) and especially the pieces that Liszt could have had in mind when writing his own, that is the *Funeral March* in Beethoven Sonata op. 26 and in Chopin's Sonata op. 35.

The aim of this paper is to discuss the relationship between Liszt and nineteenth-century Russian music.

It is well known that Liszt, during his concert tours, had many opportunities to spread his name across Russia; the composers of the rising Russian national school were deeply impressed by the Hungarian master, as some of Mussorgsky's assertions can demonstrate: «How many new worlds, perhaps, might have been discovered in talks with Liszt, how many unknown corners we might have explored together; and Liszt, by his nature, is daring and has no lack of courage, and [...] it evidently would not be difficult for him to take such an excursion with us into new lands». Such considerations are significant especially because they are provided by the leading innovator of *The Five*, who probably wouldn't have shown interest in conservative occidental composers. On the other hand, Liszt himself was one of the first European artists to praise and to try to promote – for example – Glinka, Dargomyzhsky and Borodin's works. These revealing and unusual musical interests were not always shared by Liszt's traditionalist contemporaries. On this front, there is a document which narrates Liszt's enthusiasm towards Mussorgsky's *The Nursery*: the letter by Adelaide von Schorn to the Russian editor Bessel. Although Émile Haraszti and Márta Papp demonstrated that this epistle is a historical falsification, nonetheless it might be useful to consider this document as an echo of a real problem: the mutual attraction between Liszt and Russian musicians. What is to determine is the *quality* of this relationship.

This research aims to examine Liszt's output through two different levels:

- 1) the analysis of paraphrases and transcriptions of Russian works and melodies (*Prélude à la Polka d'Alexandre Porfiryevitch Borodine. Variation pour piano seul par F. Liszt* – S207a; *Tscherkessenmarsch aus Glinkas Oper: Russlan und Ludmilla* – S406; *Tarentelle de César Cui pour piano seul* – S482; *Abschied Russisches Volkslied* – S251; *Tarantella di Dargomyzhsky* – S483 etc.);
- 2) the investigation about the actual influence of Russian composer's "non-classical" production on Liszt's compositional experience, especially on his musical grammar and syntax.

*Gesture – Knot – Correspondence*

Opera has always been written for specific occasions, for particular persons and for particular opera houses. We take as starting point the fact that the essence of opera is not its writing or its stage conception but its performance: from each singer's performance, through its immediate reception by a unique audience and the unique interaction between both parts during the show.

To examine the interactions between singers and the audience we develop a methodology of opera analysis with analytics instruments derived from science of theater and musicology together. Here we prove the decisive influence of the particular operatic performance for the understanding, the interpretation and the analysis of opera.

After giving a historiography of opera analysis since its systematization in the last century, we exemplify our thesis with the analysis of *Il Barbiere di Siviglia* from Gioacchino Rossini and the analysis of *Pelléas et Mélisande* by Claude Debussy. Both operas are stage productions of the choreographer and opera director: Ruth Berghaus (1927–1996). Here we develop three specific analytic tools: *Gesture – Knot – Correspondence*.

*Signifying temporality in Brahms' F# minor Piano Sonata*

One of the distinguishing features of Romantic sonatas is their signification of a binary opposition of musical-structural spaces: music that lies inside the sonata form versus music that lies outside it. This opposition maps onto a metaphor for musical temporality, one that opposes, respectively, temporal music versus atemporal music. Temporal music advances the narrative logic of the sonata form (by definition a temporal form in which expressive meaning hinges on a sequence of musical events in time), whereas atemporal music arrests the normative sonata progress and retreats into non-narrative contemplation, reminiscence, or evocation. Strategies with which composers signify shifts of temporality vary from one sonata to the next; this paper examines strategies employed in the first movement of Brahms' F# minor Sonata, op. 2, linking these strategies to those exhibited in other sonata movements by Brahms and Schumann as well strategies adopted in the music dramas of Richard Wagner.

Brahms' F# minor first movement engages in a dialogue with the form known in recent sonata theory as a type 3 sonata: a triple-rotational form with exposition (P, TR, S, and C), development (usually based on a rotationally ordered treatment of P and TR), and recapitulation (P, TR, S, and C again). Brahms' P theme established, with strongly presentational rhetoric, the movement's temporal space. An 8-bar P yields to a TR that arrives on an apparent medial caesura (MC), only to be quickly interrupted by material that establishes, by way of sharp, simultaneous changes in dynamic level, register, texture, articulation, and thematic rhetoric, the movement's oppositional atemporal space. The ensuing atemporal digression (mm. 15–37) is understood as having been interpolated into the form, and thus temporarily suspends the sonata proper; this one in particular, in typical Brahmsian fashion, prolongs the MC-arrival (Brahms used the same strategy in his F minor Sonata and Fourth Symphony, among other examples; some analysts consider these spaces pre-thematic statements of S material).

Brahms' S theme (in C# minor) exploits the opposition of temporal spaces thus established: strongly kinetic left-hand triplets (m. 40) derive directly from the temporal P (this is a monothematic sonata), while the lyrical, upper-register material (mm. 41–42) signifies the intrusion of a reminiscent inner voice that very briefly suspends the temporal motion. This 3-bar dialog is repeated three times, but at the last repetition the inner voice proves too strong a distraction and overtakes the sonata narrative, and a second atemporal interpolation ensues. Temporal S-space resumes 18 bars later as if continuing directly from where it left off, and the essential expositional closure (EEC) follows shortly thereafter.

The rest of the movement employs the temporal signifiers thus established in the exposition in an expressive dialog that plays out over normative developmental and recapitulatory sonata spaces.

The study of the rich musical heritage of the Albanian communities, who settled on the Italian territories over the centuries, has been recognized as specific and relevant since the early-1950s pioneering researches carried out in the *arbëresh* areas by Diego Carpitella and Ernesto De Martino.

In my paper, I will focus on the specific linguistic structures of the polyphonic practices adopted by the Italo-Albanian communities of Calabria. The features of this musical culture involve many complex polyphonic techniques. Furthermore, unlike other traditions of "multi-part" singing, the *arbëresh* polyphonic texture clearly employs a more horizontal, contrapuntal perspective, mainly focusing on two-part performances.

The main hypothesis of this study, which originated from the first analysis of the folkloric materials, regards the existence of close links between the different local practices constituting a comprehensive set of techniques, processes and practices of composition/performance related to a properly *arbëresh* musical system, beyond the occasional modifications due to standard performing dynamics.

The first phase of the study led me to the identification of a complex musical environment that possesses some of the distinctive elements of oral traditions, which differ from those of written music. Music is not related to specific authors and sound acts; it rather constitutes a "supra-compositional" code, shared by the members belonging to the same community. Music is consistent with a network of meanings and functions, and refers to a cultural system which embeds this network: a sort of collective, "implied," and unwritten operational system.

In fact, each concrete performing action should be considered as the product of creative, individual actions upon sound, and, simultaneously, as the final outcome of particular choices among many possible operational procedures, strictly relevant and consistent within the musical system shared by a group. Therefore, the usual approaches based on the identification of constant or variable musical traits, organized in paradigmatic classes, require appropriate and necessary modifications, starting from the notational choices on staff as tools for the analysis.

With this intent, I use a specific set of signs for the representation of durations ("timed semiography") beside special signs to highlight some not "equally tempered" degrees in the featured scales; specific signs also point out to the frequent "modal mutations" in the pieces. Through an extensive analytical work of transcription, I discovered one of the essential features of the *arbëreshe* musical system, shared with other systems based on oral transmission: the recurrence of formulas and stereotyped melodic sequences, ready to be used in many combinations and contexts. My work will focus on the analysis of a large body of songs, personally recorded "on field" over the 1980s.

Topics varying from death to religion to insanity have been written about the final scene of *Tristan und Isolde*, more commonly known as Isolde's *Verklärung*, or Transfiguration. Indeed, some scholars have even associated the concluding aria to an orgasm. Although this comparison has been touched upon, it lacks convincing evidence. I intend to uncover the similarities between Isolde's Transfiguration and orgasm by incorporating both analysis and scientific data.

Hugo Leichtentritt created a graph of the Prelude from *Tristan und Isolde* in his book, *Music Form*, published in 1951. He states that the surging and ebbing motion is the real dominating motif of the entire structure and that «[T]he aesthetic balance is brought about in the coda: after the most powerful outbreak, a sudden collapse follows; the entire coda is dominated by diminuendo» [p. 357]. Similar narrative and graphs have been used in the field of sexology, or sexual science.

Sexology has increased in popularity since 1966 when William Masters and Virginia Johnson published their monumental book, *Human Sexual Response*. In it, they report on reactions and feedback after observing thousands of sexual response cycles in hundreds of men and women. They describe and diagram four phases of sexual response: 1) the excitement phase; 2) the plateau phase; 3) the orgasmic phase; and 4) the resolution phase.

The first phase of the human cycle of sexual response develops from various sources of stimulation and may be extended substantially. The excitement phase correlates with the fluidity of the music that leads to the Transfiguration. Wagner's use of "endless melody" in this opera is well known, as he frequently evades cadences and elides phrases.

From the excitement phase, the human male or female enters the second phase of the sexual cycle, if effective sexual stimulation is continued; this stage precedes the orgasm. Musically, the plateau phase starts at the beginning of the Transfiguration. Having already heard the music in the *Love Duet* from Act II, we reach a higher level of anticipation in the final aria, moving us from the excitement to the plateau phase.

The third part, or the orgasmic phase, is limited to those few seconds during which myotonia, or the inability to relax voluntary muscles, occurs [p. 78]. As is well known, the lack of a genuine cadence and the tension of the Tristan chord contribute to the ceaseless suspense of *Tristan und Isolde*: when the orgasmic phase does arrive, one can only imagine the metaphorical myotonia Isolde experiences.

The last phase of the sexual cycle comes after the orgasm. Women have the potential to undergo another orgasmic experience from any point in the resolution phase. Indeed, one can interpret the Transfiguration as having two orgasms, at bars 44 and bar 61. In other words, not only can Isolde's *Verklärung* be compared to an orgasm, but more specifically, it can be analogized to the female multiple orgasm.

**VIOLAINE DE LARMINAT** (Universität für Musik und darstellende Kunst Wien, Austria)

*Density and transparency of sonic material in Luciano Berio's Opus Number Zoo Nr. 2 (Il Cavallo – The Fawn)*

Analyses of miniatures composed in the earliest period of a composer's career have always been the subject of great interest, especially in those cases where the complexity of the piece's organization and the coherence of the sonic material do not obstruct the immediacy of its perception. Such is the case in Luciano Berio's *Opus Number Zoo Nr. 2* (1951-1970) in which the text and the various stylistic allusions are conveyed with utmost transparency. While undoubtedly an analysis of the relationship between the music and the text appears essential in understanding the choice of the different motivic elements in the movement, the intension here is to focus on the organization of the sonic material and on its significance in the macroscopic formal structure, without neglecting the demanding technical and interpretive aspects of the piece, nor its metrical and rhythmical aspects which, in addition, prove essential to the piece's overall coherence. The assembly of the material is defined by a stratification of diverse musical structures, one on top of the next, which, in spite of their apparent incompatibility, coexist successfully: a structure with tritone axes, an organization of tones based on fourths with different poles, structures based on thirds exhibiting both tonal and modal behaviour, diatonic tetrachords and scales, and the use of barely audible tones at caesural points or of non-tonal cadences. Some of these musical structures are clearly related to melodic motifs which allude to the church modes, to the isorhythms of the *ars nova*, to the *bicinium* of the sixteenth century and even to the ancient practice of fourth *organum* and to the ostinato forms of the seventeenth century. Such allusions to medieval, renaissance, and baroque music led *Opus Number Zoo* to be considered by many as characteristic of the neoclassical-neobaroque movement; an inappropriate association in my opinion considering that in this case the apparent mix of different styles creates a characteristic and homogeneous language in which all the intervals assume a particular function and in which, to borrow the terminology from Ernő Lendvai, we find a division of the chromatic space which is as much linear as it is circular. If indeed reference is made to music of the past by the individual elements, the resulting sound is by no means characteristic of a particular historically remote stylistic period but instead of the musical language of the second half of the twentieth century. The analysis of the stylistically diverse structural elements will necessarily touch upon the antagonism between "tradition and modernity" – relevant to Berio's interest in music of the past – and upon the concepts "transformation and integration" which are connected to Berio's predilection for popular music of different cultural origins and their use in contexts beyond "collage" techniques. It will also show how these aspects are not limited simply to the inclusion of a stylistic attribute or to the utilization of a particular compositional technique but instead should be understood as involved in a process through which various archetypes of twentieth century music are generated. The analysis is based on the 1970 edition of the score with the Italian version of Rhoda Levine's text by Vittoria Ottolenghi.

**VIOLAINE DE LARMINAT** (Universität für Musik und darstellende Kunst Wien, Austria)

*Traditional analysis and aural analysis: rivalry or partnership?*

In order to clarify the issues at hand in the relationship between traditional methods of music analysis (understood as a scientific investigation of primary sources and historical and sociological contexts surrounding the genesis of a piece, as well as a comparison of different pieces by the same composer) and aural analysis (perceptual in nature, and informed solely by the listener's own culture, memory retention, aural skills, and ability to concentrate), as well as to illustrate their limits, advantages, and disadvantages, it is necessary to first define the goals of analysis more generally as well as its target audience. Classroom experience and frequent involvement with aural analysis confirms its place as an important complement to traditional analysis, although acting by no means as its substitute. The fact that aural analyses are made utilizing a recording instead of a score has important consequences arising from new parameters in the analytical activity. For example: characteristic or distinctive features concerning the technical aspects of the recording (audio engineering) or musical criteria such as the date of the recording (in reference to the understanding of historically informed performance practices at the time), the tuning system employed, or even the orchestration if it has been decided upon by the musicians and not by the composer. Finally, the interpretation itself in the chosen recording can be the subject of critical discussion. Even more important is the fact that aural analysis deals with sonic events which play out in a psychological perception of time. One of the goals of aural analysis is to overcome the discrepancy between notation and sound and to elucidate the relationship between intellectual (theoretical or written) and sensory (felt or heard) experience. The direct confrontation with sound and with musical experience establishes a closer connection to performance practice. As Gérard Grisey once humorously remarked: «One shouldn't mistake the map for the territory.» Furthermore, the notions of expectation and surprise are two additional and important psychological parameters in aural analysis since they are concerned not only with musical structures but also with their perception, that is to say with the psychological and sensory effects of these structures. Finally, the inclusion of the chronological dimension of music sheds new light on the importance of memory in listening to music since the ability to recall by turning back a few pages in the score – a "methodological" practice in traditional analysis – is no longer a recourse. Although aural analysis is a relatively new field and in many respects perhaps still viewed with scepticism as simply a trend, it is too different from traditional analysis to be considered its rival and has proven itself a beneficial addition to a traditional analysis course. The practice of aural analysis is necessarily limited to relatively short pieces and based on a particular recording or interpretation which, in and of itself, already represents an analysis of the work being studied and thus the question of objectivity with respect to the reader as opposed to the listener may be posed. Additionally, the activity of aural analysis is bound by the individual's culture, listening skills, memory, and ability to concentrate and is therefore to be seen as a pedagogical tool and not as a scientific activity with precise research objectives.

**ROBERTA DE PICCOLI** (Modena, Italy)

*From the symbols of the narrative process to musical actions: a form of communication.  
Analysis of the covered steps and of the results produced by a group of improvisators*

The research *Musical improvisation and Propp's narrative structures*, that was carried out at educational level by S. Battaglia and the author of this paper with the Laboratori di Ricerca permanente at the Fondazione Siena Jazz, showed the possible existence of a functional link between the fairy-tale narrative structures and musical improvisation, thus highlighting the presence of this relation in the definition of "framework". Framework is a common term that seems to be meant by the improvisators like a path that has to do with the construction of a form, within which a group performance aims at its own accomplishment. Later we realised the need for a deeper analysis of the communication systems that were activated between the musicians during the performance (in an educational context and in a live performance) for the decoding of the narrative function (meant as a part of a written oral literary production) and for its use in terms of musical improvisation (meant as a part of an unwritten oral literary production), with the aim of verifying the objective order of functionality and yield in the practice development at creative-composition level and in the coding of a type of specific language to be used in contexts outside the tale. The need for studying these communication processes is closely connected to the results and the questions raised by studies that were carried out by scholars in the educational context of improvisation, as well as in a musicological-analytic scope. As an example and to show the activated processes, this work aims therefore at proposing the analysis of the collected data through the evidence of the educational and performance phase of one of the various excerpts dealt with, by also taking into account the problems raised by Nono, Greimas, Dalmonte and Kramer who mostly contributed to the construction of the theoretical apparatus to be used together with the observations to be found. The analysis was carried out in various steps and was conceived in comparative terms: analysis of the narrative text according to Propp's scheme of functions; sound analysis of the final product (of the whole excerpt and of the separated tracks of every instrument); video analysis of the preparatory path to the final recording and the conclusive performance. The sound analysis was carried out together with the musicians themselves, who supplied data regarding the choice of the narrative functions they did for their musical action and the way through which this was done. Special attention was given to the development and management of the time (of the whole performance and of that of every performer, during the solo performance and the interaction with the others), as well as to the formulation of hypothesis regarding the type of existing relation between the pre-existing symbolic material and the material created in practice by the involved musicians (mainly of psychological and anthropological nature). The video recording was used to compare and transcribe the extra-musical communicative dynamics that the group implemented to coordinate choices and solutions, as well as for a direct comparison (of descriptive nature) of their statements on the musical action that was carried out.

**FABIO DE SANCTIS DE BENEDICTIS** (Istituto Superiore di Studi Musicali "P. Mascagni", Livorno, Italy)

*Figure, process and parametric articulation in Lumen by Franco Donatoni*

Since each process of composition takes the form of a series of relationships that are established by it, the invention of this process is the very condition that determines the function that produces immediate result. Here the function must be understood as a dynamic agent that provides similar conditions of articulation. These contribute to the formation of what I call the "figure". I mean by figure [...] any fragment in which the level of the articulation allows us to recognize the typological identity [...] (Franco Donatoni, *Processo e figura*, in *Il sigaro di Armando*, Milano, 1982, p. 83).

In the eighties many composers have defined the term *figure* in relation to their own and others' experiences of composition. At first listen *Lumen* for Piccolo, Bass Clarinet, Celesta, Vibraphone, Viola and Cello, composed by Franco Donatoni in 1975, very clearly reveals its articulation according to these principles.

This analysis, in the light of the above mentioned definitions, and through different analytical tools, including semiotic analysis and Pitch-Class Set Theory, intends to describe, as fully as possible, the form of the work, the different figures and figure complexes, their relations and derivations, the techniques of parametric articulation. This leads to two main results. On the one hand the description and identification of typical procedures of the author such as permutations, rotations, retrogrades, inversion, accumulation processes, filtering, symmetry, interval relationships and so on, of serial origin, partially recognizable also in previous works. On the other hand, a form that is well delineated, divided into nine main panels that seem to trace a path not formally divided into a sequence of sections simply juxtaposed, but characterized by a consistency of «teleological nature»: from a beginning of more static quality (the first two sections) the work gradually increases in activity (sections 3-5), reaching a climax (section 6), after which the intensity decreases (sections 7-8), and leads to the last part that seems to take on the characteristics of a Coda. This builds a linear structure that appears to violate the declared «independence of the panels» of other compositions by the same author.

The finality of procedure found in the formal course, achieved through the careful structuring of the musical parameters, and certain interval procedures and processes, allow us to venture, *mutatis mutandis*, in a concise comparison with procedures and concepts typical of spectral composers, especially Grisey.

This report focuses on the ticklish question of the relationship between the music of Giacinto Scelsi and Eastern cultures, a theme that is crucial for the understanding of the poetic universe of the composer, who himself has never made a secret of the deep Eastern influence on his musical *oeuvre*. The relevance of this matter is documented in his writings and verbal accounts, but also by the titles of many of his works: for example *Konx-om-pax*, *Aiôn quattro episodi di una giornata di Brahma*, *Ko-tha tre danze di Shiva*, *Pranam*, *Mantram* and *Quattro illustrazioni* for piano, in which the titles of the four movements are gathered from the Hindu pantheon.

The question has already been studied by several scholars [recently Anderson 2008; Giuriati 2008], who helped to place the issue in broad terms, proposing methodological reflections and analytical findings based on an examination of the scores. Here, the field of research will be extended to the recognition of the many clues that emerged from the autobiography of the author, recently published, and above all, to an analysis of the sources and sound files stored in the Archives of Fondazione Isabella Scelsi.

This study aims to answer the following questions:

- 1) In the almost unlimited field of Eastern cultures, in which specific musical traditions had the composer developed a real, detailed and specific knowledge?
- 2) What elements of these traditions, if any, were taken up in terms of compositional practice and performance techniques?

The analysis of the scores provides a series of clues to answer these questions. Since Scelsi usually preferred to entrust the task of writing his scores to others, who worked from his tape-recorded improvisations, yet it is the analysis of these "autographed materials", that provide the most decisive results. Only by analysing the tapes, in fact, can one enter the heart of the creative process of the composer, and seize the crucial moment in his "exploration" of sound.

The research results show that the influence of Eastern cultures on the composer's music, manifested not so much in the use of individual elements of musical practice, but rather in the adoption of a religious form of music-making, wherein sound is a powerful means by which to draw closer to the sphere of the divine. In the Vedic tradition, *Om* is the creative syllable, whose sound can give rise to existence, as well as to every form of transformation and dissolution; thus sound has a mystical quality, and an exploration of the sound spectrum becomes a means of seeking within. In his compositions, Scelsi aims for the creation of "right sound" (fr. *son juste*), which is the foundation of various yogic practices such as *nada yoga* (yoga of sound) or *laya-* and *krya-* *yoga*, and is one of the "vehicles" used by Buddhism – especially *Vajrayana* Buddhism – to reach a state of enlightenment.

With this perspective, Scelsi's improvisations, which represent the central moment of his creative practice, should be interpreted as a personal form of prayer.

In his late work, Giacinto Scelsi (1905-1988) developed a style based not on relationships between discrete sounds, or "notes", but on inflections of the intonation, intensity, and timbre of overlapping continuous sounds, often centred on a single pitch class. He avoided, as far as possible, traditional syntactical categories, such as note, motive, phrase, and chord.

These characteristics of Scelsi's music have led many commentators to view it as resistant to analysis. According to Tristan Murail, for example, «it is almost impossible to analyse most of Scelsi's works in formal terms. Time unfolds in continuous motion without a break.» This view is reinforced by Scelsi's own meta-discourse, in which he denied that his music followed any system, and attributed its creation to the mystical power of sound. Moreover, Scelsi's working methods reflect (and to a certain extent legitimate) this ideology: he would improvise his works on various instruments (notably the *ondiola*), in what he described as a state of trance, and then have the tapes of these "sketches" transcribed by assistants.

Some scholars have, nevertheless, sought to provide rigorous analyses of Scelsi's music. Most of these studies are of a statistical nature, focusing on properties and proportions of finished works considered in their entirety. Yet, for various reasons, there has been little attempt to characterise the decision-making process informing Scelsi's improvisations. In fact, Scelsi "automatist" approach may be precisely the element that makes it valid to search for an underlying model or "grammar" in his music, since it is generally held that any improvisation presupposes such a model.

In my attempt to describe this aspect of Scelsi's music, I shall refer to the ethnomusicological studies of Lortat-Jacob (concerning improvised music of oral traditions) and the idea of musical grammar, as developed by Lerdahl and especially by Baroni *et al.* [1999]. Such an approach is not unproblematic, as I shall discuss. However, I shall argue that it allows researchers to observe, at least in some of the simpler pieces, that Scelsi's handling of certain configurations of nuances is so consistent as to constitute a kind of syntax. I shall present a way of tracking these configurations so as to allow clear patterns to emerge. I argue that these patterns form syntactical structures of a novel kind, and that it is these structures, rather than any purely sonic property, that are common to Scelsi's "sketches", the scores, and performances.

The historical, theoretical, and pedagogical potential of Italian *partimenti* has in recent years awakened the interest of scholars. In my presentation I will first give a historical-biographical outline of the *partitura* tradition, that is, the Austrian and South German branch of the *partimento* tradition, in which the term *partimento* is substituted throughout by the term *partitura*. Important figures in the Salzburgian branch of the *partitura* tradition are Georg Muffat, Johann Baptist Samber, Matthäus Gugl, Johann Eberlin, Anton Adlgasser and Michael Haydn. Georg Muffat, the first in this succession, was a pupil of Bernardo Pasquini in seventeenth-century Rome, where probably both the Austrian *partitura* tradition and the Italian *partimento* tradition have their roots. In any case, the cadence typologies used in both traditions are closely related. The former, however, may help clarify some aspects of the latter, since the *partitura* tradition offers more verbal explication than the quite textless *partimento* collections.

In my presentation as a case study I will concentrate, in particular, on the cadence typology used in the *partitura* tradition throughout the eighteenth century, a typology that to a large extent has escaped notice (for example, it is not mentioned in the otherwise exhaustive article *Kadenz* in the *Handwörterbuch der musikalischen Terminologie*). Modern cadence typologies commonly classify cadences on the basis of their harmonic profiles. They focus primarily on the last two harmonic events (on the *ultima* and *penultima*) and define a cadence as consisting of a root-position dominant and tonic, with a melodic line achieving closure on  $\hat{1}$  (or  $\hat{3}$ ). By contrast, *partitura* and *partimento* cadences are based on the tradition of monophonic *clausulae* combined contrapuntally. In this tradition a crucial factor for distinguishing cadences is the employment of certain dissonances during the cadential progress. Having sketched out this, I will analyse some examples from the classical repertory to demonstrate how the *partitura* tradition can help refine our modern concepts of the classical cadence: it can help clarify, for example, some aspects of "formal functions" and syntactical types such as "sentence" and "period".

Until the nineteenth century, when the concept of the "musical work" began to emerge, music analysis went hand in hand with compositional practice and theory. From the Middle Ages onwards, the technical features and structural organization of existing compositions were studied essentially in order to provide models for composition. As pieces of music, especially the so-called "masterpieces" of the past, came to be regarded as "aesthetic objects" for contemplation and exploration, music analysis became more and more dissociated from compositional practice, and was established as an independent area of study, making the musical score its fixed object of enquiry. The late nineteenth and early twentieth centuries occupy a special place in the history of music analysis in that during this period the pedagogical imperatives of analytical/theoretical treatises increasingly became associated with performance practice. In this literature, one of the popular examples used by analysts of musical rhythm and form was the second movement (*Adagio cantabile*) of Beethoven's Piano Sonata op. 13 in C minor, the *Pathétique*. The ambiguities it involves in terms of rhythmic grouping provided the basis for performance-oriented analytical interpretations that theorists, including Mathis Lussy (1912) and Hugo Riemann (1919), would utilize to justify their theories of rhythm. The formal identity of *Pathétique*'s *Adagio cantabile* movement has been a matter of controversy: some analysts identify it as a Rondo while others regard it as a large ABA form. Which formal understanding of this movement should a performer follow?

In this presentation, I first summarize the existing analytical literature on the second movement of Beethoven's *Pathétique* sonata. Then, I scrutinise the movement in a case study to hypothesize that in exploring issues related to musical form, which is traditionally regarded and carried out as a score-based activity, performative aspects of the music – and indeed an instrument-specific phenomenology of performance – play a significant role. I argue that some answers regarding the formal identity of this movement begin to suggest themselves when the pianistic implications of the tempo-expression mark *Adagio cantabile* are considered. Following a detailed phenomenological exploration of what is involved in performing the movement, I argue that in the generation of formal significance, the performer's embodied musical knowledge and experience play a crucial role. The presentation also calls for a re-evaluation of the convergence of performance pedagogy and music analysis exemplified in the works of late nineteenth- and early twentieth-century theorists, but later lost to contemporary analysts pre-occupied with the notated score.

This paper aims to contribute to the identification of expressive strategies in which musical gestures and music texture contribute in music continuity or discontinuity and how these may support the overall shaping of music form. In order to achieve this objective, I apply Schoenberg's concepts of developing variation and formal procedures to considerations on music gestures and texture in the analysis of the first movement of Villa-Lobos's String Trio (1945). The first movement of the Trio is characterised by the continuous alternation of different textures, both polyphonic and homophonic, which produces the constant effect of discontinuity. However, distinct musical gestures anticipate, or not, changes in the music texture, producing then music fluency.

Formal procedures are analytical tools to critically observe how formal sectioning and continuity are achieved in music. These procedures may be subdivided into two categories: firstly, those procedures which provide continuity and extend musical structures; secondly, those which produce formal closures. However, these procedures form an important part of two essential concepts of Schoenberg's analytic theory: the concept of *Grundgestalt* and developing variation. Particularly, developing variation may comprise not only aspects related to (essentially) motivic and thematic development, but also to other parameters in music, such as texture, harmony, and specific musical gestures that delineate formal sectioning.

Formal procedures may also be understood as a technical way of identifying "musical gestures" that, in a performance, become expression in a musical work. According to Hatten gestures can be seen as «significant energetic shaping through time». He observes that musical «Gestures may be inferred from musical notation, given knowledge of the relevant musical style and culture; Gestures may be comprised of any of the elements of music...; they are perceptually synthetic gestalts with emergent meaning, not simply "rhythmic shapes". Certain motive-length gestures may be marked as thematic for a movement, hence foreground and amenable to development, variation, or ongoing evolution by means of developing variation». Some of Hatten's observations can be related to analytic procedures that Schoenberg describes in his theoretical writings.

From the above considerations, music gestures may also be reflected in the use of different music textures. In fact, as Meyer puts it «Texture has to do with the ways in which the mind groups concurrent musical stimuli into simultaneous figures, a figure and accompaniment (ground), and so forth. Like other musical processes textural organization, or the lack of it, may give rise to expectation». Meyer's approach pinpoints the importance of grouping to understand music texture, and the importance of how music texture may give rise to expectation, that is, continuity or discontinuity.

The analysis of electroacoustic music involving digital technologies often addresses the understanding of the computed interaction between actions – or gestures – and their subsequent musical results. Evaluating the particular instantiation of a programming language within a composition may thus be a condition of completing an analysis based on a score and its adjacent writings. Besides, studying a computer program dedicated to musical creation may not be only based on observation. The digital instrument, on condition that its associated program is available and exploitable, may also be transformed by the musicologist for analysis purposes. Practically, this approach raises two major difficulties: firstly, it requires from the analyst obvious skills in computer music languages; secondly, assuming these skills are established, the programs still may be tedious to observe, appropriate, and transform, as they were designed to be operational, not to be studied by anyone else than the composer or his assistant.

The aim of this contribution is to propose two program reconstructions improving their accessibility to the analyst. The considered works are *Neptune* for percussionists and live electronics by Philippe Manoury (1991), whose associated program is written in *Max/MSP*, and *Soliloque sur [X, X, X et X]* by Fabien Lévy (2002), for six digital samples transformed by a solo computer programmed in *SuperCollider*. With the example of the fourth section of *Neptune*, it will be shown the opportunity to simulate the vibraphonist's playing and to evaluate his actual control over the tempi of the electroacoustic sequences, which is only mentioned in its general principle in Manoury's writings. The program reconstruction of the first section of *Soliloque* will allow to listen to each of its patterns independently and to obtain their visual representations, which is not possible given the state of the program as it is available online for public executions.

The main purpose of this research on the methods for digital instrument reconstruction is not only the analysis itself, but also the creation of accessible tools dedicated to further analysis by musicologists who may not necessarily be experts in computer music languages. Illustrated with two well-known contemporary works, the introduction of such an approach should open up perspectives for the study of electroacoustic music, as well as for its pedagogy. It should also be useful for composers and programmers themselves, who may be attentive to the becoming of their works and their digital implementations, for which an easier and fully comprehensible access certainly allows a better transmission to interpreters and musicologists.

**CARLOS DUQUE** (City University, London, Great Britain)

*System, order and creation in the 4<sup>th</sup> Symphony of Roberto Gerhard: dynamic condition of chaos*

In this paper I will explore how Gerhard rebuilt his musical style while in exile. Even though Gerhard's music can appear random to the listener, this does not mean it is unpredictable, and this may be because we cannot determine the causal predictability as a result of the level of complexity.

Synchronization of chaos is a phenomenon that may occur when two, or more, chaotic oscillators are coupled, or when a chaotic oscillator drives another chaotic oscillator. This is the case throughout the Symphony, because mathematical theory, structural chords, substructural chords, silences, borrowed materials and time set are combined in the control of the chaos.

Gerhard uses this time-set as the basis for his Symphony, so we can see in Gerhard's words, that «The time-set is correlated to the pitch-set as an equivalent series of proportions expressed in numbers» [R. Gerhard, *Developments in twelve-tone technique* (1956), in Bowen ed., *Gerhard on Music*, p. 129]. He uses the Pitch set throughout the work, but usually using permutations of the same hexachord, as he does in the pitch hexachords as well. This means that his system is flexible, and is the "scaffolding" of the music, without any restrictions compared to other time-systems which are more closed or demanding.

In 4<sup>th</sup> Symphony, folk songs work as attractor of the chaos and similar to the series that generate the structure, generate control of chaos achieving a kind of stabilization. Gerhard often incorporates folk tunes into his music, sometimes even using the same tunes as his teacher Pedrell, but in a very different way. Pedrell uses the melody without any change, like the main theme of the music, but Gerhard changes the melody in order to integrate it into the work. By this I mean he hides the original popular tune and weaves it seamlessly into his own original music. The elements of the folk tunes that Gerhard frequently changes are metre, time, and some pitches.

In the melody Gerhard keeps the original mood, but only can recognized the tune if he is very familiar to the original. This is the oboe duet that occurs as the main part in the middle of the orchestration. As I said this process is very usual in Gerhard's music, in that he likes to hide elements and in some ways play with the audience (at least a Spanish audience), in the sense that they are listening to something that they know, but only he knows where, what and why.

This means that this technique is also a way to hide the obvious to the audience, and make the music less predictable and more random, as the level of complexity for the audience is higher. This is why we can consider this hiding technique as a chaotic oscillator. That means that the chaos that is apparent in this work is made up of different attractors. The chaos has coherence for the listener even though they may be unaware of it.

**FLORIAN EDLER** (Universität der Künste Berlin, Germany)

*On the relationship between fugue technique and sequence technique in Arcangelo Corelli's "free" instrumental compositions*

The term "free instrumental works" applies to the sonatas and concerti written by Arcangelo Corelli which are usually supplemented by the term "da chiesa" and contain no dance movements. In Corelli's "free" trio sonatas, opuses 1 and 3, where the four-movement construction already follows the "slow-fast-slow-fast" rule, there is a fugal shape to the second movement. This is also the case in the dance-like final movements of opus 1 (1681). The strict adherence to fugal principles in this collection is in keeping with both North Italian and Roman traditions. There is often a maintained countersubject, with the theme repeated in other developments and in the basic key at the end.

In opus 3 (1689), however, fugue principles have less significance. The form of the final movements with their two-part development approaches the suite type of movement, and the fugue imitation is restricted to the start of the movement. Indeed in each of the first allegro movements, there is a "tonal response" in at least two cases which is significant for the fugue technique. However the essential principle of returning to the theme is of relatively little importance in the contrapuntal movements in opus 3. In opus 6 (nn. 1–8) the themes in part only become evident in the first opening development, and the work with a countersubject becomes increasingly less important.

So how is uniformity in contrapuntal movements achieved in later collections? Two strategies stand out: first the reorganisation of the source material and the independent fashioning of initially subordinate motifs; second, the extension of the repertoire by sequence models. Sequences are already encountered frequently in the interludes in opus 1, yet the composer's stock of models is still too limited for such episodes to be of defining importance. In the later Corelli, these escalating sequences become more significant where upper voice canons with syncopations are coupled with linear bass progressions. These polyphonic sequence types can be integrated effectively into the contrapuntal movement. As some are more suited to modulations and others to reinforcing a key, the sequences assume important formal functions and can take the place of traditional theme development.

There is extensive expansion in the fugues of the *concerti grossi*, especially in consonant sequence types. By reformulating traditional models and combining them with certain form functions, Corelli innovates in the way in which he makes the sequence principle productive. In this respect, model descriptions on the basis of harmonic thinking already seem appropriate for the music of this era, even if they were a long way from the composer's theoretical knowledge.

This paper presents a study of the Italian composer Giacinto Scelsi and one of his most well known pieces, *Quattro pezzi (su una nota sola)* [Four pieces (each one on a single note)]. Serving as a landmark of his career, *Quattro pezzi* introduces the most extreme use of Scelsi's compositional approach, an approach that he called the "third dimension." What I take Scelsi to mean by the "third dimension" is the analytic attributes of musical elements other than pitch and duration. The goal of this study will be to perform an interpretative analysis describing how the idea of the "third dimension" is applied in this piece. I will therefore examine specific techniques such as microtonal clusters, trills, tremolos, glissandos, and various instrumental articulations that play an important role in making the "third dimension" of the sound convincing. I will support these ideas with specific reference to *Quattro pezzi* by demonstrating how the idea of the "third dimension" works. Scelsi's idea of the "third dimension" is not particularly new to composers/theorists before him who, although they called it differently, were also interested in focusing on various musical parameters in their compositional oeuvre. Since Scelsi's first written pieces were influenced by serialism, the idea of *Klangfarbenmelodie* and thinking about the other musical elements besides the pitch is an evident stylistic similarity. Various examples from Arnold Schoenberg's *Theory of Harmony* and Dane Rudhyar's *The Magic of Tone and the Art of Music* will be considered in relation to Scelsi's mature compositional aesthetics. Regarding Scelsi's approach to the "third dimension," a performer who closely worked with Scelsi, the cellist Frances Marie Uitti, explains: «You have to give yourself the liberty to almost forget the score. It has to feel that free.» [W. Colangelo, *The Composer–Performer Paradigm in Giacinto Scelsi's Solo Works*, 1996, p. 81]. Searching for further understanding of Scelsi's music, a pianist, Marianne Schroeder explains: «Even though Scelsi's scores are perfect, nothing is missing. There is a big difference. Scelsi's music is revealed only when it is played. I was never able to study one of his scores, while with the scores of other composers they can be studied without even playing them, but with Scelsi this would never work... I was having a lot of difficulty with interpretation» [*ibid.*, p. 158].

Recognizing the difficulties performers have interpreting his score, my study will focus on specific parts of *Quattro pezzi* where it is not sufficient to approach them just on the surface of the sound phenomenon but rather to go below that surface. This study will provide an understanding of how the various musical elements are reflected in each of the movements. In fact, Scelsi combines them in a different fashion each time they appear. Each combination produces different effects but at the same time points to the same goals: continuity and interruption of texture. A number of various issues such as the phenomenon of a single note, the difference between a note and a tone, the distinction between tone colour and pitch, the influence of various Asian traditions, the idea of multidimensional sound, and how all these elements build and shape the idea of the "third dimension," are some of the issues that this paper will investigate which would undoubtedly be helpful for further understanding of Scelsi's music.

Studies on music performance based on scientific methods have a long tradition behind them, starting from the first Swedish approaches of the 1970s. Significant articles were then published also in Italy on this topic and on neural networks for score performances. Studies like these added contributions about the relationships between performance and cognitive science. The 1990s saw the emergence of papers focusing on specific composers. The neural network models also inspired the GERMS programme for simulation of expressive performance. Another different problem was taken into account in the same years: the analysis for (not of) the performance.

The project proposed here, derives from a piece of research already presented on previous occasions [Caterina *et al.* 2008; Fabbri *et al.* 2010]. In the present paper we analysed the micro-structures of execution (tempo, its "agogic" variations, and dynamics) used by seven pianists who performed two pieces, one by Mozart and one by Debussy, with particular attention to the correspondence between the intentions they manifested in previous interviews and their actual performances. Our aims were to systematically study the individual differences among the performers, and to compare the micro variants of the pianists and the corresponding system presented in GERMS.

The two compositions, segmented phrase by phrase, were analysed by means of spectrographic devices and of statistical comparisons of the data. Particular attention was given to the end of a phrase and the beginning of the next, in order to check if the theory of the slowdown at the end of a phrase (and the dynamics related to it) expressed in GERMS, had occurred, and to observe the individual variants of the pianists. Likewise for other aspects of the G system (phrase articulation, punctuation, legato etc.) and the M system (motion principles). More particularly, in the piece by Debussy, these aspects of phrasing, were joined by others, concerning the symbolic value of the piece, and the variations of energy in movements, which may give rise to micro variants deriving from expressive and emotional reasons (in GERMS, belonging to category E = emotion).

The results of the analysis show evidence of positive correlations (for the Mozart piece) between many of the data collected by us and those predicted by the GERMS. Our analysis, however, gave great attention to the individual styles of the seven pianists: their differences are not negligible and they have been systematically taken into account. Another important topic we analysed is the difference between classical and post-romantic styles in piano performance. In this case we found useful comparisons with the methods of CHARM analyses [Cook 2010].

Many compositions by Luciano Berio show quotational elements of different cultures, which range from written, to oral, folkloric or popular traditions. Sometimes the process is explicit and these *objets trouvés* are given a sort of narrative and dramatic dimension in works such as *Sinfonia*, *Folk songs*, *Voci*, *Naturale*. Sicilian melodies in *Voci* and *Naturale* bring with them elements of the culture they come from, including performance practices, so they let us experience a true contact with that world, even if mediated and not at all disinterested – to use Berio's words.

In particular in *Voci* the coming of the Sicilian popular world to the fore contributes to the organization of the instrumental groups in the scenic space and articulates the interaction between orchestral groups, soloist and percussions: the instruments answer to the soloist that plays the popular melodies in ways recalling the relationship between soloist and choir in popular cultures. In other cases the omnivorous Berio does not insert elements or materials but compositional devices, as is the case of the eterophonic procedures inspired from the Banda Linda of Central Africa that Berio adopts in *Coro*.

External elements can also derive from Berio's own compositions: self-quotation is a common procedure in Berio's music, it creates a web of links between different compositions establishing a process of mutual references whose semantic implications are always susceptible to multiplication and amplification: these links can be traced between *Voci*, *Sequenza VI* for alto and *Sequenza VIII* for violin, but also between *Coro* and the same *Sequenza VIII*. Materials coming from other works can be inserted in a "disguised" manner in a new piece and contribute to its formal articulation, determining the choice of pitches or generating axial sounds around which the musical material grows: the chronological proximity of two works or the presence of the same instruments in different works can act as a catalyst for the proliferation of textual elements beyond the borders of a given composition. Beside the self-quotation we must recall that process of commentary that Berio realizes in his *Chemins*: here the text of the *Sequenze* is reverberated in an instrumental group that contributes to the amplification of the internal functions, acting also as a deforming mirror.

Memory acts in two ways, in the act of creation through associations perhaps not always totally conscious and during the perception allowing the listener to grasp the links and similarities: the citation element is detected as "other" but at the same time as structural; the memory of his re-emergencies in the text allows us to perceive/understand the structural articulations in a given composition and to build a web of the possible meanings.

In the present paper I will explain these concepts through examples taken from *Sequenza VIII*, *Corale*, *Voci* and *Coro*.

The music that Rota wrote outside the context of motion pictures is difficult to set in a critical framework; on the one hand, it keeps itself distant from the main musical experiences of the twentieth century, showing an apparently *naïve* attitude; on the other hand, it holds out against any attempt of shallow dismissal, given the greatly developed craftsman-like quality, and the very defined and personal poetic mark.

The Preludes for piano stand amongst Rota's most interesting instrumental works. They are at the same time rich and controlled, highly imaginative and essential; thus, they turn out to be suitable to a stylistic and expressive analysis. The Preludes present a wide range of stylistic sources: indeed Rota's music is like a mirror which conveys a surprising number of musical images from Bach, Mozart, Chopin, Debussy, Rachmaninov, Poulenc and many others, including occasional pop attitudes. However, the Preludes are not a stylistic exercise, but a synthesis, in which the elements coming from the tradition – the pre-existing terms, so to speak – are used and combined to create a new, personal language, unmistakable and artificial at the same time.

Several aspects are worth noticing, for instance the occurrence of "non functional" episodes, in which the music loses its sense of direction and gets nowhere. Rota's approach to piano, fluent and seemly natural, is the result of an accurate calculation: mostly the recurring lack of bass, and other texture devices are responsible for the poetic sense of unreality typical of most Preludes.

In spite of the large variety of expressive attitudes, the Preludes are not a mere collection of beautiful pieces, but rather a cycle, unified by the recurring of a set of processes and attitudes that the analysis will try to point out.

**AURÉLIE FRABOULET-MEYER** (Université Paris Ouest Nanterre La Défense, France)

*Body, interpretation and emotions*

The theoretical background of this communication corresponds to concerns about emotions in music and the function of the musician's body as a support for emotions' expression. Most theories dealing with this issue claim that there is an expressive dimension in music, which guides emotional reactions of both listener and interpreter.

Emotions are intrinsically linked to the structure of a piece of music and organized into a dynamic and temporal scheme. This scheme connects tension's moments and relaxation's moments of musical form with the expressive dimension of interpretation [Krumhansl 2002]. Therefore music is a dynamic process, in which understanding and also pleasure felt are connected to the perception of tensions and relaxations [Meyer 1967]. The concept of "tension" in music works at several levels (harmonic, rhythmic, etc.). It refers to the idea that there is an imbalance between different musical parameters causing a feeling of instability and expectation in the listener's feelings (note that the musician is also auditor of the work he performs). Relaxation comes within tension's decrease to return to a balance between musical parameters. These tensions and relaxations are then psychic experiences (this is true only for the tonal music which is the subject of this discussion). Thus tensions and relaxations correspond to the dynamic elements of a musical work and are combined to the emotions experienced by the listener [Imberty 2005]. The expression of a musical work does not refer to categorical emotions – that could be specifically named in verbal language – but to what Stern [1995] called vitality affects. It's referring to dynamic and temporal movements which follow the moments of tensions and relaxations.

Therefore, the aim of the present study is to analyse how the body of the interpreter is involved in this singular expression. We associated analysis of gestures, musicological analysis, and acoustic analysis to study performances of pianists during recorded situations. The results showed that the performer's body – and particularly pianist's body – is structured in four hierarchical levels: gesture, posture, cycle, and postural schema. These levels have common and different characteristics for each pianist. Thus, this organization is unique to each musical work and to every pianist too, reflecting both their individual musical expression and style. Moreover some levels are involuntary and are used without the pianist knowing. Finally the organization is characterized by a proto-narrative nature (it follows chains of tensions and relaxations with a beginning, articulation and an end), and primarily directed towards an audience, confirming its expressive quality.

These results suggest that interpreting a musical work also involves the expression of vitality affects enrolled in temporal dynamics. The body of the interpreter is a vector of these dynamics; it is more than just emotions, body tells a story of the musical work performed.

**REIKO FUETING** (Manhattan School of Music, New York, United States)

*Poet, composer, or priest? The ending of Schumann's Kinderszenen*

Ulrich Siegele, German theorist, musicologist, and Professor Emeritus at the Tübingen University, proposed an approach to analysis that considers a composition to be the result of a complex layering of various compositional parameters. It offers a step-by-step examination of a musical composition with the goal of an increased understanding of the text and its internal and external relationships through a heightened sensitivity towards distinct musical and extra-musical aspects, by relating them to the ultimate context-form. This approach evolved through Ulrich Siegele's investigations into the music of J. S. Bach, and by relating his realizations to Bach's distinct understanding of the concept of *forma et materia*.

Like any analysis, this approach employs the principle of reduction. However, the reductive method used here is not applied exclusively to pitch (as, for example, in Roman numeral analysis and set theory). It never abandons musical form as it aims to maintain the characteristics of a simple yet living, functioning, and self-contained musical organism, which is presented as the starting point of the analysis. The analysis evolves in sequential stages to music structures of increasing complexity in terms of both form and material. The individuality of this analytical approach is reflected in both the choice of the specific starting point and the choice of the specific sequence of added structural layers and dimensions. Therefore, the essence of a particular analysis does not originate in a specific method but in a detailed understanding of a composition: the analysis is interpretive. The stages through which the evolution is witnessed do not claim to recreate the compositional process. They reflect an individual understanding of the relationships of a composition.

This procedure is applied to the opening of *Der Dichter spricht*, the thirteenth and concluding movement of Robert Schumann's *Kinderszenen*, op. 15. The analysis originates in the relationship of the musical specifics to the title. It outlines nine conceptual stages that gradually unfold the structural hierarchies of the excerpt as understood by the author. The first eight measures are reduced to a simple and strict chorale. Its internal characteristics trigger specific changes (such as changes of harmony and rhythm), additions (non-harmonic tones, ornaments), and modifications (rhetorical figures). This analysis is complemented by an investigation into the ending of the penultimate movement of the cycle, *Kind im Einschlummern*.

The ultimate goal of this analysis is to connect the specifics of the musical content to the piece's programmatic aspect as indicated by the title.

My presentation has two consecutive objectives: the first is to reveal the architectonic principle set out by Chopin in his Ballades, which is highly original in terms of the tonal organization; the second is to argue that Liszt developed the same principle by achieving its full potential in his own Ballades, notably, the second one.

Many musicologists have paid attention to the structures of Chopin's Ballades. Their general common strategy was to highlight the differences from the classical norm. In other words, the structural particularities of Chopin's Ballades were defined by the distance from the classical sonata-plot. But, if Chopin succeeded in lifting up the Ballades for piano solo into a new independent genre, a way must be found to describe their structures in their own terms.

To this purpose, it may be useful to employ the concepts of "interlocking tonality" and "directional tonality", both concepts being brought to music analysis by G. George [1970]. In fact, the two concepts have already been introduced, respectively by H. Krebs [1981] and by W. Kindermann [1988], to the structural analysis of Chopin's music, notably the Second Ballade. The presenter takes a step further: when the two concepts are operatively combined, all the Ballades will be described as the different realizations of the so-called "interlocking-directional tonality", which consists of the original architectonic principle set out by Chopin.

The perfect realization can be found in the Fourth Ballade. In effect, this Ballade is described as the interlocking of two different tonal directionalities: one is the directionality of "from F minor to F minor" and the other is the directionality of "from G $\flat$  major to F minor." The former presents its trajectory as F minor→F minor→F minor→F minor, therefore tonally stable; the latter presents its trajectory as G $\flat$  minor→B $\flat$  major→D $\flat$  major→F minor, therefore tonally dynamic (ascending thirds). The conjunctive point of the two directionalities is F minor, on which all the force of the work finally explodes.

Liszt composed two Ballades, but their quality is uneven. While the First Ballade can be understood as the modest assimilation of Chopin's, the Second Ballade can be well described as the interlocking of the two tonal directionalities: one is the directionality of "from B minor to B major", the other is the directionality of "from F $\sharp$  major to B major". The latter is evidently the dynamic one, which presents its trajectory as F $\sharp$  major→F major→D major→B major (descending thirds). But, the former, is it the stable one? It seems so; but in fact, it represents also the dynamic directionality, which presents the trajectory as B minor→B $\flat$  minor→F $\sharp$  minor→G $\sharp$  minor→C minor→B major. So, Liszt realized here the interlocking of the two dynamic directionalities: that is the realization of the potentiality of the architectonic principle which Chopin's never achieved in his Ballades.

AIM of this study is to survey the relationships, real or fictitious, between Corelli's op. V and Vitali's op. IV. The two works, written in 1700 and 1701, respectively, are miscellanies of church and chamber sonatas. The survey focuses on the Sonata n. 12 of their works, in both cases a set of variations on the *Folia*. The study examines the different compositional approach taken by the two authors, harmonization and diversity in dealing with the thematic material with the intention of emphasizing, wherever possible, the similarities and connections between the work of Vitali (1701) and Corelli (1700).

Vitali's op. IV was published on 29 October 1701 at the Duke of Modena's printer, Fortunato Rosati, with the following title: *Concerto di Sonate a violino, violoncello, e cembalo / consacrato / All'Eminentissimo, e Reverendissimo / Signor Cardinale Ottoboni / da Tomaso Antonio Vitali bolognese / servitore attuale / Dell'altezza Serenissima / di Modena / Opera quarta.*

Vitali probably already in 1701 attended the Accademia Filarmonica in Bologna, at least judging from the composition that he wrote in 1703 to obtain the academic degree. The dedication to the Cardinal Ottoboni can be seen as a form of thanks for the interest that the cardinal was giving for the cause of recognition of statute of the same Accademia of Bologna. (This recognition came only in 1716 but he was and remained in those years one of the most important protectors of the Academy.)

Corelli's op. V is divided into two parts, the title page recites: *Parte Prima/ sonate a violino e violone [...]* The sheet that divides the two parts has the following inscription: *Parte seconda/ preludii allemande/ correnti gighe sarabande/ gavotte e follia.* From the titles listed in the title pages it is possible to see that Corelli has divided, within the same work, the church sonatas (collected in the first part) from the chamber sonatas (collected in the second part).

With these two works we are dealing with works written in different fields: the "courtier" Modena for Vitali, the Roman sphere – the living rooms of the palace of the Court, the residence of Cardinal Ottoboni – for Corelli. At the present state of knowledge we cannot know whether the two authors knew each other personally, but both were academics of the Philharmonic Academy of Bologna. Vitali's work, however, is a clear homage to Corelli, and it is the proof that Corelli's works had a wide circulation. In fact Corelli's works became a model for Vitali's op. IV.

*Between musical prose and sequential patterning: problems of hypermetre in Wagner's musical dramas*

Carl Dahlhaus took the view that Wagner with *Rheingold* (1854) radically turned away from his former inclination to regular periodical structures. Instead, according to Dahlhaus, he established a "musical prose" in which the grouping into modules of equal length only plays a minor role. This view nowadays has become the "mainstream" among scholars. Strangely enough, it contrasts with the dominant opinion in former publications about Wagner. There, vice versa, the repetition of elements, especially in shape of sequences, was declared to be a vital element of his mature works. Some scholars criticized this practice (from Adler to Adorno), some praised it (Lorenz). As often in the history of music theory, such contradictions are based on talking at cross purposes: the authors bear on quite different phenomena of the music. Vocal parts and recitative-like transitional passages serve as paradigm of "musical prose", whereas the dominance of sequences (especially of *Leitmotive* or parts of them) can be primarily traced in closely-knit symphonic passages. Those structures are not shaped in the classical manner, with strictly corresponding antecedents and consequents, but are held tonally and syntactically open. Nevertheless, they are of great rhythmic and metric regularity, and thus Wagner's music is impinged by the "the Great Nineteenth Century Rhythm Problem", «the danger of too unrelievedly duple a hypermetrical pattern, of too consistent and unvarying a phrase structure» [W. Rothstein, *Phrase Rhythm in Tonal Music*, Schirmer Books, New York 1990, pp. 184-85].

It is to be questioned how Wagner avoided the danger of monotony in his practice of sequence. On the other hand it can be demonstrated that there exists indeed much genuine musical prose in Wagner. Yet it is not a permanent feature of his mature music; it is limited to quite particular instances, often connected with passages of transfiguration and enchantment, of ecstasy and dramatic climax. In other instances it is a means of depicting nature. But musical prose appears in many contexts, dependent upon the musico-dramatic situation.

*ScoreSifter: software for analysis of post-tonal music, using domain-based segmentation*

The problems in analysing contemporary music are a true complexity issue. In fact, a post-tonal composition can take on a multi-dimensionality of parametric aspects by making use of all the new resources available for the writing of music. So becomes essential to define an analytical method that has characteristics of reproducibility through compositions also very different in the post-tonal music.

As proposed in recent past [W. D'Ambrosio, M. Gabrieli, E. Pozzi, *Towards an analysis of post-tonal music: theoretical considerations and applications of method*, 4<sup>th</sup> EMAC, Rotterdam, NL, 1999; *Id., Thematic aspects and the avant-garde: the use of new technology in the definition of the concept of theme in 20<sup>th</sup> century music*, 5<sup>th</sup> EMAC, Bristol, GB, 2002], our proposal is what we like to call "the theory of domains". What is meant by domain and in what does the concept of domains differ from that of musical parameters? If the latter essentially concerns one of the peculiar elements of the sound such as duration, intensity, timbre and pitch, the concept of domain instead is a dynamic concept tied to the possible syntactical rules that describe the time development of a complex set of parameters.

The identification of these domains, together with those parameters that seem to be particularly significant in the piece in question, is thus the first step to be taken. Considering that these can be specific to each composition, this identification will take the form of a sort of preliminary reconnaissance to determine their number and their quality. The behaviour of the domains, in our view, give us the structural "engines" of a piece which, in a certain sense, coincide with the compositional structure adopted by the composer and, on a wider scale, with his or her style.

The large number of operations and the many possible analytical interpretations involved in this system have made it necessary to create *ScoreSifter*, a special application which, by automating certain aspects of the investigation, allows us to continuously monitor the results both graphically and numerically. *ScoreSifter* arose in particular from the need to have a reliable and at the same time flexible means of carrying out all those measurements and calculations that normally take up such a lot of time. Naturally this kind of research is not limited only to post-tonal music. Many kinds of thematic searches can be possible for every score of the last centuries, simplifying for example the thematic research work in contrapuntal music repertoires. An in-depth procedure of this type enables us then to formulate stylistic hypotheses that can, afterward, be compared with those coming from analysis of other compositions by the same or by other composers, in line with a musicology that wishes to actively contribute to the construction of the history of the musical style.

*The exposition of the first movement of Beethoven's E♭ major Piano Sonata op. 7, between formal functions and Sonata Theory*

The exposition of the first movement of Beethoven's E♭ major Piano Sonata op. 7, contains four thematic units in the new dominant key (mm. 41 to 127). Of these themes, the first three close with a strong perfect authentic cadence (mm. 59, 93, 111), while the fourth one (mm. 112-127) lacks a formal closure, prolonging the new tonic twice above a stable pedal point through the circular 8 - ♯7 - 6 - ♯7 - 8 pattern – a large galant *Quiescenza*, as Gjerdingen calls it.

Speaking of this exposition, A. B. Marx refers to such thematic events as a *Satzkette*, followed by a ten-measure closing *Satz* (mm. 127-136). His reading could largely overlap with an analysis along the lines of Caplin's *Theory of Formal Functions*; as every unit closed by a PAC in the new expositional key unambiguously expresses a subordinate-theme function, the first three themes (mm. 41 to 111) – perhaps, also the next one, though it is lacking in cadential closure – share the same formal function within a subordinate-theme complex, the last unit serving as a postcadential closing section. Nonetheless, Marx makes a highly interesting remark that can help shed new light on the shape of the whole exposition. In connection with the opening theme in the dominant key, and its varied repetition (mm. 41-59), he points out a lack of stability and «an almost *Gang*-like effect» on account of its running eight-note motion.

In my paper, I will use the foregoing suggestion, as well as some analytical tools of Darcy & Hepokoski's Sonata Theory, as starting point for alternative considerations of the thematic functionality in the subordinate key area of this exposition. First of all, I will discuss the opening theme in the new key: does it actually serve as a subordinate-theme function or – maximizing Marx's penetrating remark about its *Gang*-like character – might one suppose this theme is more properly part of the transition, though it decisively closes with a PAC? In this regard, I will investigate the problematic assumption that the first medial caesura-effect at m. 39 – at first, a strong, normative first level default, V: HC MC – could be understood along the lines of what Darcy & Hepokoski call *medial caesura declined*. If so, the proper MC will occur at the next cadential point (m. 59) – a rarer third-level default, V: PAC MC, now successfully launching a satisfying subordinate theme (mm. 60-93).

A second question is about the two following themes (mm. 93-111 and 112-127). Do they also express a subordinate-theme function? In terms of Sonata Theory, the location of the *essential expositional closure* (EEC) – by definition, the first satisfactory PAC in the new key that proceeds onward to differing material – allows us to differentiate subordinate themes from closing ones. But which of the two PACs does actually serve as the EEC, the one at m. 93 or the other at m. 111? By choosing the former, I'll argue both units are closing themes expressing a postcadential function. In support of my reading, I will finally consider their relation to Caplin's expanded cadential progression and the schema of the *Quiescenza*.

*Rising to the occasion ... Avant-gardist trends in Spanish orchestral music (1955-1975)*

After years of economic autarky and international isolation, music played an important role in the difficult process of normalization of Spanish culture: the separation from Manuel de Falla's neoclassical model, and the progressive exhaustion of composers involved in the outlook immediately subsequent to Spanish Civil War – such as Joaquín Rodrigo, Ernesto Halffter or, from 1950 on, Óscar Esplá, chair of ISMC Spanish Section in 1955 – gave way to somewhat moderately innovative and eclectical aesthetic attitudes (Joaquim Homs, Gerardo Gombau or Xavier Montsalvatge) and, first of all, to a new generation, born around 1930 and known as "1951 Promotion", which, from 1957 in tight contact with European post-avant-garde, decisively contributed to bring up to date Spanish composition.

Composers as Juan Hidalgo, Luis de Pablo or Cristóbal Halffter usually visited Darmstadt Summer Courses and Donaueschingen Festival from this end of 1950s, and the task of some groups of ephemeral life (Nueva Música in Madrid, Música Oberta in Barcelona) in spreading international avant-gardist repertoires on Spanish stages – in the early 60s Stockhausen, Ligeti, Cage... held speeches and concerts in Madrid and Barcelona – and in discussing aesthetic and technical innovations in journals as *Acento cultural* or *Sonda*, should not be ignored: they led, even if indirectly, to the organization in Madrid in 1965 of two significant events, the I Biennale for Contemporary Music and ISMC Festival. Moreover, several European publishing houses assumed the edition of scores by Halffter, De Pablo or Xavier Benguerel and Italian, French and German orchestras, ensembles and performers began to play regularly works by Spanish composers.

The gradual incorporation of serialist techniques [Hidalgo's *Ukanga* (1957) and *Caurga* (1958), both given their first performance at Darmstadt, Halffter's symphonic 5 *microformas para orquesta*, (1959-60), one of most resounding scandals in Spanish recent music]; the attention to self-restrained aleatoric procedures [Josep Maria Mestres Quadreny's *Antiodes* (1964), De Pablo's *Tombeau* (1964), and, again, Halffter's *Anillos* (1967-68)] and to electro-acoustic experimentation [Halffter's *Espejos* (1963), Mestres Quadreny's *Tres cánones en homenatge a Galileu* (1964)]; an initial approach to intertextuality [De Pablo's *Heterogéneo* (1968), Tomás Marco's *Angelus Novus* (1971)], and the fascination towards some "alternative" ways, from Messiaen to Ligeti and Polish composers, in compositions as Benguerel's *Diálogo sinfónico* (1969) and Joan Guinjoan's *Diagramas* (1972)... all these are milestones of this hard and irreversible process, and will be considered in this paper paying attention both to their structural frames and to their new understanding of timbre and texture features, especially regarding to orchestral compositions.

The conspicuous presence of non-diatonic modes, common in all the works of Claude Debussy, and the relationship so close that they are able, nevertheless, to establish with the tonality, is one of the most attractive features in the art of the French composer. In some cases we can feel the presence of a particular type of scale already from the surface of his musical language: the whole tone scale at the beginning of *Voiles* (from First Book of *Préludes* for piano), for example, or the pentatonic mode of *Pagodes* (the first piece of *Estampes*). Usually, however, Debussy hides a non-diatonic scale under a pseudo-tonal surface, making it not immediately perceptible; alternatively, different modes, alternated and/or combined together, create an iridescent effect, a continuous changing of colours. Debussy's musical language is based on the juxtaposition of very small musical units, linked by relations of duplication or contrast, as if they were the pieces of a mosaic. Each of these units is based on a finite number of pitch-classes: a situation, in short, that would seem ideal for an analytical approach based on Pc-set Theory! Looking more in detail the pitch-class sets found in the music of Debussy, however, we note that they often correspond to known types of scales: whole-tone scale, pentatonic or octatonic modes, as well as the acoustic scale and Gregorian modes. They are then used not only to generate motivic and/or thematic elements, but also to produce chords, or, more in a general sense, as a reserve of pitches from which to draw for the production of all horizontal and vertical events present in a specific musical unity, each of which is also based on a definite reference pitch (tonic or *finalis*), another aspect that would be lost with a reading based on Pc-set Theory.

This interpretation seems the most appropriate for the specific language of Debussy, and also allows us to emphasize another aspect of great importance, that is the way in which the transition from a mode to another one takes place. The solutions found by Debussy to make possible the transition among different modes are the most varied. When the composer wants to make as smooth and natural the process of transition, he uses a subset of a complete scale: the absence of one or more pitch-classes, in fact, produces an effect of ambiguity that facilitates the abandonment of a previous mode encouraging the transition to the new one. Another possibility is to emphasize in the texture one or more pitches that will play a prominent role in the new mode. These compositional techniques are even more successful thanks to the presence of some "chromatic shiftings", so typical of Debussy, which may be considered the response of the French composer to Wagnerian chromaticism.

The most surprising aspect, finally, is the way in which Debussy is able to combine this technique with the requirements of the tonality. The great variety of types of scales used, in fact, although considerably enriches the harmonic context, it never completely preclude the tonal functions. A double interpretation is always possible: the first is based on the scale obtained from the pitch classes present in a specific musical unity, while the second one takes into consideration the relationship established between the different units that remind the traditional tonal syntax.

It is well known that, in the polyphony of the second sixteenth century, cadences are bound with modes by their definitional function, and by their potentialities to create deviation. Moreover, they have a syntactic value similar to that of punctuation in speech and therefore play a formal part.

But there is more to it than this. As a matter of fact, cadences have various forms which are described in numerous treatises. By combining the information they provide, it is possible to draw up a useful typology for analysing the music itself. Thus cadences are perfect, semiperfect or imperfect (Dressler and Zarlino), major, minor or minim (Vicentino), simple or reduced (Zarlino). Special forms come in, the fifth-sixth-octave cadence (Zacconi) or the whole consonant cadence (Tigrini) as a witness. Melodic cadences that compose them are also strictly defined (Burmeister).

With these typological milestones cleared, this paper will discuss some examples from Orlando de Lassus's motets. More specifically, the pieces which are examined come from publications both of the beginning and the end of the composer's career : *Le quatoisiesme livre a 4 parties* (Antwerp, 1555), *Il primo libro de motetti a 5 et a 6 voci* (Antwerp, 1556) and the *Cantiones sacrae sex vocum* (Graz, 1594). Since the Franco-Flemish master has exhausted almost all the possibilities of forms and uses of cadences in the vast corpus which he left, the conclusions drawn from this study may hence have a paradigmatic value.

At this time of my research, the following preliminary results can be sketched. Perfect cadences are more conclusive than the imperfect ones and, thanks to an appropriate *dispositio*, they participate in prioritising of the parts. The double cadence, a special type of cadences combination described by Siegfried Hermelink, gives greater weight to the cadential procedure. The subtle implementation of melodic cadences, which sometimes lead to evaded cadences, contributes to the formal dialectic break/continuity. Cadences are also an important element of *varietas*: in a long section of music based on the same textual unit and a single subject, they can constantly renew the speech through different forms. The choice of cadences is also related to the types of textures used specifically, and some textures are built with a mesh of successive cadences. The rhetorical power of cadences can be important: a major cadence (thus built on "long" rhythmic values) based on a *clausula peregrina* can "put before the eyes" a strong element of the text. In addition, the whole consonant cadence reflects the imprint of the madrigal in the motet.

It is no wonder that Burmeister and Dressler consider the cadence as one of the most important elements of poetic music and hence they grant it a prominent place in their treatises. Similarly, Lassus's music seems to owe its outstanding expressive quality to the virtuosity of the cadences implementation.

In this paper – which is part of a wider on-going research concerning intertextual practices in the context of musical-dramatic displays at the end of twentieth century – I will discuss the creative use, within opera and multimedia dramaturgies, of devices and methodologies inspired by mechanisms and behaviours inherent to new technologies, particularly the hypertext, the database and the list. As subject of analysis, I will focus the works resulting from the collaboration between Louis Andriessen and Peter Greenaway, produced in the 1990s: *M is for Man, Music, Mozart, Rosa, the death of a composer*, and *Writing to Vermeer*. Deconstructive phenomena occurring within this paradigm are clearly influenced by post-dramatic filmic and theatrical mechanics, as by the epistemology of convergence culture [Jenckins 2006], sanctioned by the collision and cohabitation of new and old media and technologies. The creative paths are structured – with the recurrence to heterogeneous, fragmented, occasionally borrowed or revisited materials – on large semiotic networks which mirror the radical patterns of the polyvocality and cultural variegation of the contemporary urban culture environment [Bauman 2007], repeating and transforming themselves, and questioning the genre's ontology. Implementing principles of stylistic pluralism, in a convergence model, these works reveal a common motivation of exploration and transgression of the limits of representation, observable on the several sound and visual plans (in a complex performative text) and sharing a critical argumentation marked by the skills of the media devices in presence. This question arises not only as a response to the need for new mechanisms that allow a creative non-narrative management of segments of information, but also to the urge to bring together, critically, genres, artistic practices, old and new textualities.

Generally speaking, there are two principal ways of viewing the evolution of tonality. Either, one can consider that it was already put into question during the nineteenth century, in which case Schoenberg's atonal music would represent its dissolution; or, on the contrary, we can see this as the period of its expansion, as is witnessed by its persistence throughout the twentieth century.

Therefore, can one reasonably discern within this binary category the plurality which one observes and which only accentuates and accelerates it? Moreover, the evolution of musical language, in particular from the nineteenth century onwards, is not seen as a succession of moments during which one of these two great orientations reigned supreme. It would seem, then, in our view, that the emphasis of the issue should be shifted to a conception in terms of salutary *tensions* and *conflicts* between these two tendencies. Thus, the calling into question of tonality has been the guarantee of its revival, which takes nothing away from the radical research undertaken by Liszt, Scriabin or Schoenberg.

Here we will concentrate on the analytical methods which will permit us to realise what the composers in question have produced within the context of the phenomenon of the persistence and expansion of tonality during the twentieth century. We will focus the discussion on a body of works which appeared during the first half of the century (Ravel, Manuel de Falla, Bartók and others).

*The roles of sender and receiver and musical signification within sixteenth-century improvisation*

Improvisation usually connotes music that is created spontaneously; however, sixteenth-century ornamentation manuals outline a more scenario-driven process. In this context, improvisation can be better understood within the realm of generative grammar, structural linguistics, and semiotics. In linguistic and aesthetic terminology, early improvisation is a generative procedure in which practiced gestures and melodies are woven within a structure to maximize the music's aesthetic beauty. Rather than a random association of musical ideas, the performance is improvised with clearly defined melodic, rhythmic, and harmonic constraints. In this sense, the concept of improvisation is replaced with the concept of structured variation and becomes something closer to a compositional process rather than a musical stream of consciousness.

The hermeneutic and phenomenological roles of the composer, performer, and the audience are often compared, metaphorically and literally, to language. Within analytical models, however, this linguistic comparison more often presupposes that the music has been composed rather than improvised. In this context the performer is merely the "automaton" that transmits the musical content from the composer to the audience – whereas this is not necessarily so in improvised music. According to Tarasti, improvisation is problematic because it «...does not only concern a product, object, or text but involves the act of improvisation, the activity itself». Because the roles of the sender and receiver vary whether the music is written versus improvised, this complicates the transferral of aesthetic and semiotic meaning. How do we classify the "improvised" music of the sixteenth century? After all, while many instrumental pieces were written down, what we are reading was presumably born out of improvising on various forms of borrowed material. This paper discusses the problem of aesthetic "impurity" in improvised music. Specifically, given that Saussure's structural linguistics were written in the context of the spoken word, it is often argued that linguistic comparisons are not immediately transferable. Within this context, I address how the musical signification of the quasi-improvised music of the sixteenth-century is affected by the paradigmatic roles of sender and receiver. While the models of Peirce, Nattiez, and Greimas are often used to consider the transfer and reception of meaning, I propose, however, that Whitehead's phases of concrescence provide a more flexible model when considering the roles of sender and receiver in the context of the quasi-improvised music of the sixteenth century. My conclusion is that currently accepted models and Whitehead's analytical processes are not diametrically opposed; rather, they are complementary in the paradigm of sixteenth-century improvisation. While this paper focuses primarily on sixteenth-century improvisation, the basic methodology can easily be adapted to other genres of improvised music.

*Ordnung, Rhythmus, Takt: eighteenth-century musical temporalities*

The paper that I propose examines a dramatic change in the conceptualization of musical meter that took place during the eighteenth century. This change in musical thought participated in a broader shift in the construction of time. During the long eighteenth century treatises on subjects such as aesthetics, music theory, mathematics, and natural philosophy began to reflect an understanding – first articulated in Newton's metaphysics – of time as an ongoing flow within which events were situated and ordered.

Central to the formalization of a new construction of metre was the revolutionary theory Johann Philipp Kirnberger advanced in his *Die Kunst des reinen Satzes in der Musik* (1771-1779). Kirnberger's theory of metre described musical time as an empty expanse within which events were situated, employing the same language of an endless, spatial flow that had informed Newton's metaphysical writings. Kirnberger, however, is also remembered for his codification and recording of older compositional practices (especially those he inherited from his teacher, J. S. Bach). His lengthy discussions of the relationship between metre and character have often been described as conservative; indeed, the chapter on metre in *Die Kunst des reinen Satzes in der Musik* is mostly taken up with an exhaustive description of metre signatures, many of which were no longer in use at the time of his writing.

My paper argues that the apparent juxtaposition between the conservative writings and the innovative theory in Kirnberger's treatise is, in fact, the key to understanding its relationship to the period's shifting conceptualizations of time. The same impulse that drove Kirnberger to catalogue antiquated metre signatures also created the aesthetic doctrine out of which his revolutionary theory of metre was drawn. This impulse – common to music theory, aesthetics and natural philosophy alike – is best described under the general framework of *Ordnung*. A way of knowing or understanding the world, *Ordnung* described the impulse to order and collect that fuelled the creation of the period's encyclopaedias. In this way, *Ordnung* was invested with the preservation of the past. However, the impulse to order also created the possibility for a new understanding of time itself, as an endless flow within which the order of events was situated. This paper uses the framework of ordering, collecting, and organizing to re-frame the new and the old in eighteenth-century theories of rhythm and metre. It brings together the intellectual history of music theory with the aesthetics of order, situating these connected concepts under the broad rubric of temporal conceptualizations. A window into eighteenth-century aesthetics, *Ordnung* simultaneously supplies us with ways of understanding compositional practice and metre's intellectual heritage.

**SERGE GUT** (Université de Paris Sorbonne, France)

*The adaptation of Beethoven's sonata form in certain works of Liszt's mature years*

When Liszt had come to stay at Weimar in 1848, he had the ambition to compose some works, especially in the field of orchestral music, in order to prove his ability of applying the "Grand Form". This means he had to use a structure which had the pretension to rival with the masterworks of Vienna classicism. Before succeeding he knew hesitation and he even committed errors. But finally he arrived. One of his greatest successes was the genial adaptation of Beethoven's sonata form, which he did so skilfully that sometimes – with superficial analysis – you will not be conscious of Beethoven's influence.

In this lecture we shall try to show how the sonata form is used as an underlying frame for the structure in the following works: "*Dante Sonata*", *Les Préludes*, *Prometheus*, the *Faust-Symphonie* and the *Dante-Symphonie*.

For each of these works we shall examine the detailed schematic plan of the form, in order to state afterwards what is conformable to Beethoven's habits in sonata form and what differs from it. It will particularly interesting to underline that – even if in a composition there are three, four or five different themes – always two structural themes remain which are fundamental and guide us in the analysis. These two are very reliable supports, for they are always given in the exposition in the principal tonality for theme 1 and in the median tonality for theme 2. In the recapitulation both of them are found in the principal tonality. This recapitulation is not following – as with Beethoven – a thematic development, for Liszt does not feel at ease in this part of the sonata: he will not or he is not able to "develop". The reasons why it is so will be discussed. The works without programme have a recapitulation where the themes are exactly the same as in the exposition.

As to the Symphonic Poems, the function of the programme will be examined under the formal point of view that means which tricks of art Liszt used in order to stick faithfully to the programme while absolutely preserving the essential pillars of the sonata form. Among these tricks, the most important one is that which is called the *thematic transformation*. In this process the themes which appear again in the recapitulation – opposite to what happens in the works without programme – are deformed but entirely recognizable.

The chronological aspect will also be approached, because the influence of Beethoven's sonata form is essentially limited to the period of Weimar. Last not least, the psychological situation will not be forgotten.

Concluding this lecture, the author will not hesitate to give a personal judgement on the particular situation of these works, inspired by Beethoven's model, in the general frame of Liszt's musical production.

**CHELSEY HAMM (chair), JUAN A. MESA, KATRINA ROUSH**

(Indiana University, Bloomington, United States)

PANEL: *The induction of emotion in music: three case studies*

The question of how music triggers emotion in listeners has only begun to be formally researched in the last twenty years. Though no single model consistently accounts for the induction of emotion in disparate styles, we believe that preexisting models can be combined to elucidate new ways of interpreting the emotional content of music and its effects on listeners. The aim of our panel is to present applications of these models to three specific works by different composers of contrasting stylistic periods and genres.

In our applications, we distinguish between perceived and induced emotions in the sense outlined by Marcel Zentner and Tuomas Eerola. We take Jenefer Robinson's persona theory alongside Robert Hatten's theories of agency, aesthetically warranted emotions, and expressive gestures as a point of departure for analysis. We also include ideas from David Huron (contrastive valence), John A. Sloboda and Patrik N. Juslin (mechanisms for emotional induction), Alf Gabrielsson (peak emotional experiences), and Elizabeth Hellmuth Margulis (musical tension). We examine such expressive features in two arias from Puccini's *Turandot*, Bach's *O Mensch, bewein dein Sünde groß*, BWV 622, and the second movement of Ives's *Orchestral Set n. 2*, respectively.

The application and combination of the aforementioned models can effectively highlight those characteristics in the music that may trigger emotion. By examining salient musical parameters, text settings, and the works' historical and cultural milieu in light of these models, we glean insight into expressive musical meaning. This allows us to connect the expressed emotions on the surface of the music with those induced in the listener. In *Turandot*, induced emotions help listeners identify with the characters; in Bach's chorale prelude, music joins with text in suggesting emotional meaning to the Christian believer; and in Ives's *Orchestral Set n. 2*, a complex emotional trajectory elaborates the underlying narrative of transcendence.

The third movement of Charles Ives's *Orchestra Set n. 2*, titled *From Hanover Square North, at the End of a Tragic Day, the Voice of the People Again Arose*, is one of the most emotional works in Ives's mature output. Ives himself wrote about the movement in his *Memos*, describing its composition as the result of an emotionally charged reaction to a highly tragic event – the sinking of the Lusitania in 1915. Musicologists such as J. Peter Burkholder, Denise Von Glahn, Jan Swafford, and James B. Sinclair have provided convincing analyses of this movement, explaining the uses of and reasons for musical borrowing, the work's form, the movement within the context of “the sounds of place,” and aspects of rhythm and pitch, but questions about musical expressive meaning have yet to be fully addressed by scholars. By exploring the perceived emotions in this work and their relationship to the musical parameters that evoke them as well as their relationship to the work's form and Ives's philosophical and religious beliefs, one can come closer to gleaning meaning from this poignant movement.

Building off the work of music theorists Robert Hatten and Jenefer Robinson, I substantiate a claim for a four-part composed expressive trajectory (CET), or what Hatten calls «musical discourses that involve the intentionally conceived presentation, development, and interaction of expressive states,» within this movement. To support this claim, I also incorporate Robinson's persona theory, which explains that listeners imagine protagonists whose struggles, triumphs, and failures they hear projected in a emotional work; emotions are therefore induced in the listener, because they empathize with their invented persona. I demonstrate the plausibility of four complex, overarching emotions within this proposed CET: tragic mournfulness, nostalgia, patriotism/triumph, and calm/transcendence. I also show that these four overarching emotions are compounded and enriched by multiple other emotions, which are also triggered in the listener by salient musical gestures and stylistic associations.

I incorporate the work of music cognitive researchers such as Alf Gabrielsson, David Huron, Elizabeth Hellmuth Margulis, John A. Sloboda and Patrik N. Juslin, and Marcel Zetner and Tuomas Eerola to support the emotions I outline in my CET. I also relate this emotional trajectory to the movement's unique, processive form, designated by Burkholder as “cumulative form,” in which a theme gradually builds up and emerges temporally, much like the build-up of complex, emergent emotions within the CET that I have proposed. Finally, I relate my CET to Ives's optimistic, Transcendentalist-influenced beliefs, which contribute to the underlying narrative of transcendence within this movement. By utilizing models such as that which I have proposed, one can come closer to gleaning musical meaning from this poignant movement, and may thus come nearer to fully understanding some of Ives's most beautiful and moving compositions.

A acute methodological problems inevitably arise when attempting to apply reductive linear analytical techniques to bodies of music that are essentially monophonic and modal. Although it remains the obvious reference, the Schenkerian model cannot be transposed here without extreme caution. Since this model was exclusively designed in relation to the specific structures of diatonic tonality, its implementation in the context of pop music already proved difficult since neither the usual rules of voice-leading, nor those relating to the very definition of tonality – such as the absence of prolongation, at the first level, of the descending V-I arpeggiation (or Schenker's specification that this prolongation can only be achieved, at the later levels, through the third) – are observed there. Because of its contrapuntal nature, moreover, the fundamental structure is by definition unsuited to music that is lacking a bass line regulated by harmonic relationships. In respect of this model, Western medieval music as well as most non-European music, be it popular or learned, combine the impediment of modality with that of monody.

With the recent development of analytical studies of world music – extending the object of analysis well beyond the customary Western canon of the eighteenth to the twentieth century – the urge for the elaboration of new, refined, and relevant approaches increases. Indeed, there is no reason why these repertoires should remain covered, as it were, with a veil of analytical darkness, as if they were unworthy of being analysed, unfit for this type of investigation (that is to say, unanalysable), or that – with no slight intended – the only approaches deemed to be valid in their case were the sociological or anthropological ones.

What makes reductive analysis particularly valuable is that it enables to bring out the interweaving of embedded prolongational levels, thus allowing the grammatical structure of the music to be revealed from a generative perspective, which, in turn, may eventually lead to a (partial) recreation of its processes. The models here are mathematically based in connection with previous work on diatonic theory such as that of Carey and Clampitt [1989]. The aim is to gain further understanding than that lent by theories of the descriptive-prescriptive type that are usually encountered in the discussion of Arabic music. This does not imply the rejection of analyses based on the distinction of tetra- or pentachordal genera, as illustrated for example – from a cognitive viewpoint – by Ayari [2008], but to offer a more general framework that may embrace these approaches.

*"Une nouvelle énormité fantastique": Franz Liszt's Grande Fantaisie symphonique on themes from Berlioz' Lélio as an experiment in symphonic form*

Hector Berlioz was a crucial model for Franz Liszt's own aspirations as a composer. Although just eight years older than Liszt, Berlioz set a landmark with his *Symphonie fantastique* in 1830, which strongly inspired Liszt. He had attended the first performance, and arranged it for piano. Liszt also attended the premiere of the combined Symphony and its sequel, the "melologue" *Le retour à la vie* (later named *Lélio*) on December 9, 1832, and he was very impressed by Berlioz's musical style and his personal character throughout his life.

This historical context is important for a multi-faceted analytical approach to Liszt's *Fantaisie symphonique*. Composed in 1834, and premiered on April 9, 1835, its symphonic one-movement design was inspired by recent one-movement concertos by Weber (*Konzertstück*, 1821) and Mendelssohn (G minor Concerto, 1830/31). The relationship between piano and orchestra is special, since it replaces the "ritornello" form of the traditional concerto with the new approach of a soloist's "character" and an orchestra that supplements the soloist's statements with dialogical "comments," but also represents a symphonic scope.

Liszt used mainly two themes from *Lélio* for his *Fantaisie*: the melancholic song *Le pêcheur* and the vivid and energetic *Chanson de brigands*. These songs represent a considerable expressive contrast that provides material for a musico-dramatic discourse that reflects the original musical language of Berlioz as well as it conveys Liszt's emerging stylistic features. Liszt juxtaposes the single phrases of the original themes within a rhapsodic sonata form. This raises several questions worthy of analytical scrutiny: how does the thematic material function within the one-movement design, and how does Liszt generate unity between the two contrasting themes, along with other (original and borrowed) material? Transitional and developmental procedures, the role of the solo piano as a "narrator," and the recapitulation of the fisher's song in the coda reveal complex formal procedures and different layers of expressive musical design.

Jay Rosenblatt [1995, 2002] is the only scholar to date who commented on this work, which was published first in 1981. He states that the work does not show any traces of "melodic transformation" that Liszt is famous for in his later works. However, Liszt already experimented with this technique in his *Fantaisie symphonique*, particularly with regard to the function of the solo piano. Berlioz's original themes already represent a compositional design that includes melodic transformation within the context of strophic variation and "rotational forms" as a central means of structural unity [Rodgers 2009]. I am arguing that Liszt did not just borrow Berlioz's themes, but moreover adopted them as a structural device that allowed him to further develop his individual compositional language. Liszt's work is not an arrangement or *pot-pourri* of Berlioz's original ideas, but a recomposition.

*Intertextual and intratextual relations in Alfred Schnittke's Peer Gynt – Epilogue*

In the last years the methods of analysing music in view of their intertextual relations have increased constantly, last but not least maybe in correlation with the discussion on musical postmodernism. But it is interesting to recognize that the systematic concepts of memory relations like "intertextuality", "composing reception" or "remembrance" are used nearly separately. I think all these concepts have in common the using of quotation. There is only a difference in the degree of citation: from exact quotations to the technique of adaptation or the principles of allusion.

In my paper I will combine these different concepts, which access to the context of a pretext every time, and afterwards I will derive the "polystylistic" of Alfred Schnittke as a specific form of "intertextuality". For showing the various intertextual relations in concrete I will analyse selected passages from *Peer Gynt – Epilogue* (A. Schnittke).

The headline of my paper uses also the expression: "intratextuality". This term is generally accepted in the studies of literature, but less established in musicology. The outcome of this is the dichotomy of the term "intertextuality" in: a) external intertextuality and b) internal intertextuality. By this means there are three levels of textuality for gradual analysing: 1) First prominent motives from the *Epilogue* will be found in their origin in previous numbers of Alfred Schnittke's ballet (Intratextual Level). 2) Accordingly the original motives have to be compared to possibilities of external quotation. (Intertextual Level). 3) Concluding, a comparison between the *Epilogue*-motives, the original motives, and the quoted motives can give information about possibilities to interpret or to construe the meaning of the *Peer Gynt – Epilogue*. Both exact quotations (for example: 1<sup>st</sup> motive from G. Mahler's: 9. Symphony, last movement or the theme of Tschaikowsky's: *Flower Waltz* from *Nutcracker*) as jazz-allusion (for example: some sounds of the wind section or written improvisation), and allusion to "Musique Invisible" (by using a tape-choir) will be managed in my analysis.

The aim of my presentation is to extend the term "intertextuality" to all given recursive or memory concepts to analyse music. For showing my ideas I will analyse interesting passages from a well known but not clearly reground work: Alfred Schnittke's *Peer Gynt – Epilogue*.

The present paper examines those different ways in which Liszt's compositional procedures distance themselves from principles of classical sonata form while to a large extent they are still based on them. In the case of the piano piece *Invocation* from the cycle *Harmonies poétiques et religieuses* the sense of distancing is based partly on chromaticized voice leading, especially mediant and half tone chord relationships, but it is based also on the way that thematic appearances are transformed and further developed in the course of the piece. These music theoretical issues are then given a further interpretation in terms of topical and narrative analysis.

Methodologically the analysis is based on Hepokoski and Darcy's sonata theory and the way in which classic sonata form is altered through various procedures of deformation while late romantic style is reached in Liszt's compositional practice. Neo-Riemannian transformations and other methods suitable for describing common-tone tonality are utilized to describe the formation of more or less transitory auxiliary tonal centres. Yet, it can be seen that these various tonal relations are nevertheless embedded within a classical tonic-dominant tension and its resolution that can accordingly be presented in basically schenkerian analytical vocabulary. The other group of methodological factors that are the cause of sonata deformations, i. e. thematic transformations of basically upward or downward melodic motion, can be interpreted in Greimassian semiotic terms as inchoative and terminative semes that ultimately are able to integrate the form and complete a narrative program that is able to reflect the semantic sense of an apostrophic prayer suggested in the title of the piece *Invocation*. A central methodological contribution of the present paper is the argumentation that aims to show that narrative qualities residing in the piece are basically to be derived from the formal-analytical factors – even if this occasionally may be based on opposing meanings rather than on one-to-one correspondences between the formal and narrative levels of analysis.

The formal outline of the piece appears to be a rather unequivocal one (exposition, development, recapitulation, coda) and hence in accordance with the classic conception of sonata form. The same cannot be said about the tonal development of the piece that often appears to come about in sudden and unpredictable ways, which obviously lives up to the spirit of the piece as a searching prayer and that perhaps attempts more to raise questions than give an answer to them. This very tension between the formal outline and the wandering tonal landscape also forms the basic motivation for the narrative character of the piece.

In the piano piece *Invocation* there has emerged a classic sonata form within a deformed tonal force field on the one hand and the directed alternation of inchoative/terminative semes that also makes up a narrative program on the other hand. It is the tension between these two formative tendencies that makes up what may be termed "interlocking signifying units" in the formal-topical narrative of the piano piece *Invocation* and that is thus responsible for initiating the poetical narrative arch that is able to carry its influence to the cycle as a whole.

Often viewed as an outgrowth of a particular French aesthetic reacting against the perceived excesses of German Romanticism, Ravel's motivic transformations demonstrate utmost economy of means by utilizing minimal motivic material in maximal harmonic and collectional contexts. However, some of his motivic processes – such as generating thematic and harmonic content from a motivic cell – resonate with the earlier "Germanic" tradition. This paper examines Ravel's motivic techniques in the conceptual space between the two poles of mechanist and organicist metaphors (the motive as an "object" vs. the motive as a "cell") and illustrates their functions and interactions within larger musical contexts.

Many of Ravel's motivic transformation result from changing environments. Changes in collections distort the original intervallic shape of a motive; e.g., the exposition's diatonic S-theme in the *Introduction et Allegro* returns in octatonic form in the development. Scale-degree reinterpretations or harmonic recontextualizations present otherwise unchanged motivic objects in a new light; e.g., in the Piano Trio's first movement, the coda's recasting of the original A minor theme in C major (*pianissimo* and *lointain*) evokes the topos of nostalgic memory. These kinds of motivic transformations tend to treat a motive as a malleable musical object.

On the other hand, some of Ravel's motives generate thematic and harmonic content for an entire movement (e.g., the pitch set ACEG in the first movement of the Piano Trio), link themes in dovetailing fashion (*Knüpftechnik*) as in the String Quartet and the *Sonatine*, and support cyclic procedures in multi-movement works, from Ravel's chamber music to orchestral works such as the *Rapsodie espagnole*. In those contexts, the motives fulfil nineteenth-century organicist tenets such as those of Schenker and Reti who confer on motives an independent existence capable of growth and propagation.

We may relate the various functions and metaphorical concepts of motives to the ways they influence our perception: where easily discernible, motivic transformations help to guide the aural comprehension of a particular design or create musical equivalents to transformations expressed in text or programmatic scenarios. For example, in *Ondine* from *Gaspard de la nuit*, the main theme's collectional and textural changes signal *Ondine*'s futile attempt to marry a human: moving from the opening's context of a seven-sharp key signature and oscillating accompaniment to a no-sharp/flat signature and *a cappella* recitativo, the dry unaccompanied D Dorian melody at *Très lent* betrays the fact that *Ondine* is literally out of her element (water). On deeper, less immediately perceptible levels, motivic transformations serve to create a sensation of coherence and unity. That both mechanist and organicist notions of motive are applicable to Ravel's music reflects its place between tradition and innovation in the early twentieth century.

*Micropolyphonic texture in Górecki's Symphony n. 3*

The first movement of Henryk Górecki's (1933-2010) Symphony n. 3 contains one of the most massive and unprecedented expansions of pitch space in music history. This paper illustrates the essential compositional technique that allows Górecki to inflate pitch space across 212 measures, eight minutes, and seven octaves: micropolyphony. To better understand the ways in which micropolyphony impacts compositional structure, this paper proposes a novel analytic method for modeling micropolyphonic texture.

Richard Taruskin defines micropolyphony as «tiny close-spaced canons that cannot be heard as such because of the pitch saturation» [Taruskin 2010, p. 215]. However, this fails to describe Górecki's micropolyphonic texture. Despite the pitch saturation in the movement, the strict canonic procedures and linear structures of the outer-voice counterpoint are indeed audible. Indeed, Adrian Thomas states that outer voices form an «increasingly dense harmonic wedge» [Thomas 1997, p. 82]. Furthermore, David Cope states, «The outer lines of micropolyphony are, more often than not, the most important lines present» [Cope 1997, p. 103]. Thus, Górecki employs in the outer voices a textual wedge of micropolyphony that expands pitch space.

After examining various definitions of micropolyphony, I generalize a theory regarding Górecki's specific deployment of pitch and time intervals in the canon. Next, I examine the specific Catholic folk tunes comprising the micropolyphonic textural strands of the canon. Finally, I conclude with a hermeneutic reading that considers the Catholic folk-tune strands of the micropolyphonic textural complex in the context of Górecki's devoutly Polish Catholic faith.

For example, Górecki creates a 24-measure melody by combining portions of *Oto Jezus umiera* (*Lo, Jesus is dying*) and *Niechaj Bendzie Pochwalony* (*Let Him be praised*) [Thomas 1997, pp. 84-5]. The ten instances of the theme occur locally in E Aeolian; B Phrygian; F# Locrian; C Lydian; G Ionian; D Mixolydian; A Dorian; E Aeolian; A Dorian; and E Aeolian. Regarding the time interval, the voices enter canonically above the ostinato bass at a time interval of 25, rather than 24, measures. This one-bar delay creates the micropolyphonic texture of layered Catholic folk melodies that expands pitch space with continuously broadening textural density.

More importantly, Górecki's micropolyphonic texture reflects his personal compositional aesthetic. On the one hand, Górecki's micropolyphony contains "something old," namely the use of his beloved Catholic Renaissance tunes. On the other hand, it contains "something new," namely a novel approach to dissonance treatment and texture. Thus, Górecki's synthesis of old and new, of simplicity and complexity, allows him to use micropolyphonic textures to contribute something inspired, profound, and novel to the venerated symphonic genre.

*Boundaries transgressed: text setting in Dido's Lament*

In this paper I will explore voice-leading, rhythm, and text setting anomalies in Purcell's lament to probe issues of meaning and music theoretic anachronism.

I begin with the musical practice of Purcell's Italian predecessors [Kalkowich 1991; Rosand 1979; Williams 1979] concerning lament, ostinato or ground, descending tetrachord, and chromatic fourth or *passus duriusculus*. In Italian usage, the minor tetrachord is emblematic but not exclusive for the operatic lament (e.g. Monteverdi's *Arianna's Lament*). Comment on English predecessors on the ground [Williams 1979], French influence [Kalkowich 1991; Williams 1985], and Purcell's own use in a few cases [Kalkowich 1991; Price 1994] follow. Morley, Bernhard, and Bull use chromatically ascending minor tetrachords, and Nivers and Lully use descending minor tetrachords with or without chromaticism. These reflect in Purcell's lament, a chromatically filled descending minor tetrachord.

I set aside the issue of tonality to read the anomalies with ideas familiar to composers of Purcell's London [Bailey 1998; Barnett 2002; Herisone 2000; Owens 1998]. I create a figured bass from Purcell's score with Dido's part above, and using ideas from late renaissance counterpoint [Morley 1597], I identify problems, usually concerning dissonant treatment (*prima pratica*). Using techniques documented by Bernard [Hilse 1973] and later others, I use *seconda pratica* analysis to resolve these to *prima pratica* models. Problems of text setting in a rhythmic, "metric" [Houle 1987] and syllabic sense are next.

These anomalies are semiotically interpreted [Monelle 2000] and *Figurenlehre* [Hilse 1973; Bartel 1997; Williams 1997, 1985] are identified to understand these as pointers to transgressions [Holford-Strevens 1999; McNeil 1999]. The anomalies are also compositional boundaries transgressed, and many are shown to be only apparent from my interpretation of Purcell's score in light of his musical theoretic milieu [Hilse 1973; Morley 1597/1962; Playford 1674/1966; Rothstein 1990].

With a historically plausible analysis as a backdrop, I critique my analysis, that also uses ideas from mildly anachronistic thought concerning polyphonic line [Matthews 1739]. In the end and by a careful process of elimination, I conclude that something like today's more sophisticated understandings of tonal music are here necessary: these understandings point to and clarify what I take to be Purcell's deliberate technical transgressions that in turn point to a reasonable depiction and interpretation by him (as asserted by the analyst here, of course) of the personal and implied political transgressions outlined in the aria's text.

I conclude with ideas and questions concerning multiple sign systems of today and the past: how can they be used in harmony avoiding and attenuating some lacunae and problematic claims of individual theories and less thoughtful charges of anachronism?

Noteworthy for its tumultuous character, avoidance of clear tonic expression, and dramatically paired opening motives, Brahms's *Capriccio* in G minor (op. 116, n. 3) begins *in media res*, and is marked by ongoing turbulence. This paper traces two principal elements of disruption that appear within the *Capriccio*'s opening measures; the first occurs in the right hand's descending motive G-E $\flat$ -C-B $\flat$ -A, which returns in various guises and plays a central role in disrupting the *Capriccio*'s tonal structure. The second element of disruption is the prominent melodic disjunction [Hoag 2008, 2011] occurring between measures 2 and 3, where the leap downward from A $^5$  to B $^4$  leaves the pitch A $^5$  hanging [USA pitch notation]. (This moment is considered a melodic disjunction because the strong tendency tone F $^{\#}$  $^5$  is only temporarily resolved by the G $^5$  and A $^5$  that follow it. Instead of resolving to G $^5$  or perhaps B $^5$ , as might be expected, the music plunges down a major seventh through an abrupt octave displacement, presenting a corresponding statement in a lower register, beginning on B $^4$  [mm. 3-4]). The ascending branch of the opening melody F $^{\#}$  $^5$ -G $^5$ -A $^5$  repeatedly fails to resolve in its own register.

For various reasons, it might first appear that both elements of disruption are resolved in the climactic moment of m. 59, which appears near the end of the piece's middle section. An intriguing detail on the autograph manuscript of the *Capriccio* shows dark scribbles next to the pitches in m. 59, showing that Brahms may have changed his mind regarding which accidentals to use for that sonority. I argue that Brahms's apparent indecision regarding the exact nature of m. 59 underlines the importance of this climactic moment and the pitch conflicts represented therein. The full paper traces the genesis of the sonority in m. 59, and shows how it is related to the movement's opening disruptive elements.

It is generally agreed that European, especially German music theory in the eighteenth century was defined by the dominant, yet at once "progressive" music theory of Jean-Philippe Rameau; alongside this, all other music-theoretical discourses of the time are reduced to insubstantial, restorative secondary tendencies. In my lecture, I attempt to show how, at the start of the eighteenth century, all the harmonic "theories" that still shape the discourse on harmonic analysis came about almost simultaneously, in different places and from different traditions: the *règle de l'octave, basse fondamentale*, Rameau's "functional theory" developed since the *plan abrégé*, as well as the German and North Italian "scale degree theory" (*basso fondamentale*) – all these theoretical approaches developed virtually independently of one another in the first half of the eighteenth century and refer to different musical repertoires. Among other things, I will try to show how East German music theory in particular (Stölzel, Schaffrath, Neidhardt etc.) was directly influenced by North Italian music theory (Callegari, Vallotti, Sabatini) and its "radical" concept of dissonance, and that it reached a formulation with effects far beyond its narrow regional space in the theory of the Dresden *Kapellmeister* Johann David Heinichen, who lived in Northern Italy for over seven years. It is precisely in Heinichen's music-theoretical work that North Italian speculative thought and the practical "figured bass" of the Neapolitan and older East German tradition come together – tendencies that researchers often present in opposition. A text whose significance is still far underestimated is Georg Andreas Sorge's only allegedly "practical" figured bass manual, in which a modern sensualistic casuistry is combined with the old, "German" Pythagorean tradition of the *triad harmonica* and virtually pushed to the limit. Sorge's conception of fundamental bass differs completely from Rameau's *basse fondamentale* and theory of harmonic progression. His music theory not only matches Rameau's speculative music theory in complexity and speculative spirit; it even surpasses it in many aspects. Sorge's writings constitute the first fully valid formulation of the "scale degree theory", which became the dominant paradigm of European harmonic theory in the course of the eighteenth and nineteenth centuries. In the European music-theoretical discourse of the eighteenth century, the different artistic, pedagogical, methodical and also composition-technical traditions increasingly mingled and influenced one another, often entering astounding alliances across boundaries.

Rameau's music theory forms one principal thread of development, but its status in the eighteenth century was by no means as monolithic as was claimed from the late nineteenth century onwards. Only against the background of the methodical diversity in European music theory can one understand the specific course taken by the reception (in Germany, but also elsewhere) of Rameau's music theory in the eighteenth century. Individual elements of Rameau's theory found their way into strong and vital music-theoretical traditions, where they were developed further completely independently of their actual origin – and often their true purpose – and combined with the concepts and ideas of the respective traditions.

Although technically Schenkerian analysis seems to be a method of contrapuntal analysis, it aims to be something much more – the theory of (tonal) music *per se*. However, as an analytical theory of counterpoint it is not quite satisfactory. Particularly, its model of the background structure in the form of the two-part *Ursatz* is problematic. It seems to be impossible to analyse adequately the tonal counterpoint without the equal status attached to all of its voices. It also seems that the elimination of the inner voices from the background level results in a serious misunderstanding of its upper voice, especially the function of scale-degree 5 (being essentially a cover tone, rather than the *Kopfton* of a fifth-line with its problematic *unsupported stretch*).

Because the source of inconsistencies in the *Ursatz* is not the bass arpeggiation but rather the *Urlinie* – as a kind of *line* – it may be supposed that the main matter of Schenker's analyses is the *counterpoint of lines* rather than that of *voices*.

There can be a temptation to align some of the basic notions of Schenkerian theory in the following way: *Naturklang – Stufe – Linie – Ursatz*. From this we might conclude that simultaneously with the rise of the *Stufe*, the traditional counterpoint of voices has been replaced by the counterpoint of lines. However, considering the facts of music history, this line of reasoning proves to be wrong. On the one hand, we know that the basic rules of the classical counterpoint have been established not later than the middle of the fifteenth century. On the other hand, cardinal changes in harmony during the transition from the modal harmony of the Renaissance era to the functional harmony of the Baroque era occurred without influence on the basic rules of the classical counterpoint which were established much earlier. Therefore it seems that it is the new way of using the elements of the counterpoint of voices, rather than its radical transformation into a "counterpoint of lines," that takes place with the rise of "harmonic tonality".

Instead of the traditional Schenkerian analysis, an alternative method of contrapuntal analysis can be proposed, based on a five-part *voice-leading matrix* rather than the two-part Schenkerian *Ursatz*, as the high-level structure of tonal counterpoint. Rather than unfolding the mystical "chord of nature", it represents cadential models firmly rooted in the tonal harmony. Whereas Schenkerian analysis makes it possible, at best, to connect each tone of the melody and the bass line, through a definite number of transformations, with the background structure, the new method extends this possibility to the tones of any of the voices. Since the traditional Schenkerian analysis has, in this sense, stopped halfway in disclosing the hierarchical structure inherent to the counterpoint, the new method may be one of the ways onward towards its total description.

The apparent unsuitability of Schubert's lyrical idiom to early nineteenth-century sonata form has fuelled one of the most prolific analytical debates since the third decade of the twentieth century. It was not only Schubert's success in the realm of song composition which threatened his reputation as an instrumental composer, however; the perceived excessive lengths of his more ambitious compositions, precipitated by a repetitive idiom, was taken as an equally vulnerable aspect of his style. It remains curious, then, that while the issues surrounding Schubert's lyricism have been addressed and reappraised in the literature, the problem, as it became, of his 'heavenly lengths' remains largely unexplored from an analytical perspective.

This paper takes up that challenge by looking closely at the editorial history of Schubert's final Piano Sonata, in B<sub>b</sub> major, D 960, which offers an illustration of the extent to which these alleged excesses in length were taken as a fundamentally dispensable aspect of the composer's style. To this end, I offer a comparative analysis of two interpretive editions of D 960 by Harold Bauer [1918 and 1942] against the Wiener Urtext edition [1999], with the aim of assessing the structural and dynamic ramifications of Bauer's omissions and alterations. Both Bauer editions comprise greatly reduced versions of Schubert's original sonata, with Bauer's cuts falling into one of four categories: literal and varied repeats; octave repeats; sequences, and silent bars. Bauer also made a number of small alterations to the original version in each of his editions, such as filling in chords with richer harmonies and rendering the bassline in octaves rather than single notes.

While such changes are relatively trivial, others result in important structural considerations being overlooked, or adversely affected. The clearest instance of this, and the focus of this paper, is the first movement's retransition (bb. 174–215) where Bauer's omissions give rise to a far less dynamic structure than Schubert's sonata. The existence of the continuity draft for this sonata further complicates the situation, especially given that a comparison of Bauer's two versions of this section reveals that he did, in fact, restore some of Schubert's original music in the later edition at this important juncture, a point which suggests his own dissatisfaction with the earlier edition and his possible acquaintance with the draft.

Ultimately, in examining the editorial history of D 960 via an analysis of the three versions of the first movement's retransition, this paper fundamentally questions the widely held view which considers Schubert's repetitions tautologous and redundant, and reveals the formal indispensability of many of his apparent «excesses in length and repetition» [Bauer 1918].

It is well known that the first time the poet Mallarmé heard Debussy's reduction for piano of his *Prélude à l'après-midi d'un faune* in C major, he claimed to have been greatly surprised by what he heard and that it did not resemble in any way the music he knew. I would like to try to understand which similarities, which connivances, the poet may have discerned in Debussy's music, and inversely, which intuitions Debussy may have gleaned from the famous "Tuesdays" when he went to listen to Mallarmé talk about poetry.

Debussy's music is probably one of the most innovative of the twentieth century in that it inaugurates a specific way of writing musical time, as a juxtaposition of moments, each almost isolated from the others, each with its own value, colour and quality. The music of Debussy and the poetry of Mallarmé feed off the same fears: fear of emptiness, of nothingness and death is intertwined with the luminous fulfilment of the moment. For the one as for the other, the emptiness that forms in the time of death is unthinkable; it is a hollow that is maintained as a foreclosure within the time of consciousness.

Meaning for Mallarmé is movement, the movement of the pure poetic creative act just as it is also the movement brought about by reading the poetic text itself in its sensible meanders when the musicalities and symbols carried in the audible flux of speech knock against each other. This is one of the major consequences of the "disconcerting" experience of the reader caused solely by the musical suggestion of words and their soundings: in the discontinuities of incantatory, almost magical, speech that make up the entire poem, the unpredictable, moving forces of words come together and reflect within each other. It is precisely this returning of discontinuity within the continuity of consciousness – or perhaps within the unconscious – that constitutes the *temporality of emergence*.

In other words, the poetry of Mallarmé is made of a triple layer of time and meaning. In the first instant of the poetic process, the search for an evocative utterance fragments and perforates the fabric of time into moments. Then, it is in the movement of writing that leads to the unpredictability and apparent obscurity of the text and of its "effects" that the renewed continuity of internal, subjective and dream-like meaning is once again outlined. This same meaning, which emerges also through the movement of reading, is the one that ensures the indefinite renewal of the poetic act in its very temporality.

It is this same temporality of emergence that I will try to describe in the work of Debussy. I will try to restitute what struck the poet when he first heard the music of *Prélude à l'après-midi d'un faune*. But what I will also try to show regarding this work and others by the composer is that this temporality of emergence is also wrought in live musical interpretation, in the movement imparted by the conductor. A comparison of recordings of *Pelléas et Mélisande* by Karajan and Abbado will reveal in particular the role of the conductor.

**Background.** Body movement and facial expressions in piano players have been studied so far in a qualified number of scientific works. Taking into consideration some well known psychological works we may assume that some piano players' expressions – mostly of arms and face – have similarities with gestures accompanying verbal language. Recent studies indicate that in music performance as in spoken language a connection between gestures and meaning can be found and that facial expressions and body movements in piano playing could have a similar function to hand gestures in verbal language.

**Our previous studies.** The study we are going to present comes from a long term project in which we examined how gestures accompany musical phrasing. In our analysis we took into consideration psychological aspects as well as music interpretative variables (articulation, dynamics, tempo, and agogics). As a result of this analysis we were able to produce an observational instrument in which facial and body expressions are combined with musical variables. In particular we prepared an analytical grid where each note of the composition could be analysed from the point of view of the produced sound and from the point of view of the gestures that could be connected with sound. Different facial and body areas were considered in the grid.

**Aims.** The general aim of our present work is to describe the functions of interpreters' facial and body expressions within piano performance, especially to underline musical "form" and musical "ideas". Another aim is to show how different functions may be active in musical pieces belonging to different music traditions and realms.

**Methodology.** We asked 7 professional pianists to study and to perform two piano pieces: the first movement of Mozart's Sonata K 282 and the Prelude n. 4 (*Voiles*) of the first book by Debussy. A special device (*Moog Piano Bar*) was used in order to obtain in real time some information about key velocity and articulation. Facial and body movements were put in the grid by two independent judges.

**Results.** Differences between the interpreters were found. Some interpreters prefer to focus on sound results and use a more interiorized gesture system; others seem to use gestures as forms of expressive stimulation. Quantitative analysis of non verbal signals shows that in the performances of Debussy compared to those of Mozart, interpreters use fewer eye-closing and neck movements. These movements seem linked with the musical structure of Mozart's piece, while some expressions in the Debussy performances are related to the description of "voiles" such as rhythmic movements of wrists and rhythmic breathing which may assume an iconic value.

This paper attempts to mediate between music theory and analysis, music psychology, computer-assisted music analysis and the neurobiology of musical perception and memory. As part of his interrelated research programmes of computer analysis and synthesis of musical patterns, and the formalization and computer analysis of similarity in music, Cope used his *Sorcerer* program to track the pattern-antecedents to the opening phrase of the finale of Beethoven's Piano Sonata op. 13 (*Pathétique*, 1798). This phrase is interpreted as being made up from several discrete patterns arising from a variety of different antecedent works by Bach and Mozart, Beethoven's phrase constituting a meeting point for their later incarnations. While Cope does not formalize his project in these terms, such patterns are musical memes (or "museemes"), transmitted from antecedent composers to Beethoven by imitation. The same approach, conducted more explicitly and comprehensively in the light of memetics, is employed to analyse a phrase from Beethoven's Piano Sonata in A<sub>b</sub> major, op. 110 (1822), revealing numerous possible antecedents, many from the works of Mozart, to Beethoven's phrase. Some of these antecedents are foreground-level museemes, but others are situated at deeper structural levels, representing examples of middleground-level museemes and "museemplexes" (complexes of evolutionarily independent museemes). This analysis also involves the sort of music-psychological determinations long advocated by such commentators as Gjerdingen and seemingly essential to prevent theory and analysis from degenerating into apophenia.

In an attempt to mediate between such analytical discourse, the computational approaches which motivated it, and the psychological and physiological processes ultimately underpinning them, the neurobiological encoding of memes is then explored, using William Calvin's Hexagonal Cloning Theory (HCT). This theory (building on a long tradition of columnar models of cerebral functioning) contends that attributes of objects and phenomena are represented in the brain by resonating triangular arrays of neuronal "minicolumns" distributed across cerebral cortex, the association of such arrays into hexagonal groupings allowing the attributes of an object or entity – such as a physical object or a museeme – to be represented. Such hexagonal groupings form plaques which compete for cortical territory in explicitly Darwinian fashion. The HCT appears to be a strong candidate theory for understanding both the representation of musical patterns by the brain and the perception and cognition of segmentation and similarity. It also offers a mechanism for the operation of Cope's concept of the "lexicon", a set of musical patterns related by abstraction of similarity relationships, the lexicon conceived here as a meme allele-class by analogy to the gene allele-classes of biology.

*Nuages*, the first movement of the orchestral triptych *Nocturnes*, features a rather daring approach to pitch organization. Completed some ten years before the first atonal compositions of the twentieth century, *Nuages* deals with "tonalities" in a manner both unprecedented and foreign to the compositional endeavors taken up by Debussy's contemporaries. The present study attempts a consideration of the work's idiosyncratic pitch organization and a glimpse at the impact Debussy's pitch novelties might have exerted on early twentieth-century composers. We acknowledge ten distinct scales as the work's pitch depositary: melodic minor, octatonic, 2:1, octatonic, 1:2, acoustic, acoustic-octatonic, whole-tone, Dorian, Mixolydian, Aeolian, and pentatonic. An appraisal of, and the relationships between, the pitch centres reveal the primary role of the octatonic scale. The pitch structure is organized around an octatonic pentachord, host to the work's two competing pitch centres: B (primary), and G (secondary). B is the tonic of B melodic minor and B octatonic, 2:1, the scales that provide the pitch material of the 1<sup>st</sup> thematic design (bars 1-4). Then the music takes a tonal "step" to assert G as the flat submediant, but the music's real purpose is the arrival at the alternative octatonic ordering (1:2); the tonal progression is but the means to this end. Of the two octatonic orderings (B octatonic, 2:1, and G octatonic, 1:2), Debussy chooses to exploit the latter, which allows for the formation of root position tertian structures on its potential pitch centres G, B<sub>b</sub>, C<sub>#</sub> and E. With the exception of E<sub>b</sub> (which intrudes by way of a special root relationship with the octatonic pitch centre B<sub>b</sub>), *Nuages* features octatonically related pitch centres exclusively, composed out into various "coloristic" modalities. Moving primarily in octatonic space provides a solid foundation of integral coherence. To this end, surface motivic unity and the pitch inter-relationships between the various scalar types used are vital contributing factors as well. We acknowledge three important aspects of scalar relationships: 1) quality and similarity of sia (successive interval array), 2) scalar kinship and, 3) harmonic consistency.

*Nuages* brings into orbit unprecedented pitch interrelationships especially with regards to scalar generation and scalar interaction. Octatonic generation at the musical surface moves beyond the (typical of High-Romanticism) norm of symmetrical root linkage; Debussy here draws on generative combination. Scalar interaction in turn is facilitated by generative combination and pitch substitution, a technique that makes easy the direct juxtaposition of scalar material (i.e. the fifth scale degree in B melodic minor is substituted by the flattened fifth in B octatonic, 2:1 at bars 1-4).

These techniques were soon to be widespread among early twentieth-century composers. For example, Scriabin's persistent preoccupation with the interaction between the acoustic and octatonic scales via pitch substitution constitutes a close approximation of Debussy's pitch novelties in *Nuages*. It would not be farfetched to suggest that Debussy sets an important syntactical canon in these respects.

**SUSANA KASYAN** (Université Paris Sorbonne, France)

*The concept of varietas and composition processes in fifteenth-century music*

The concept of *varietas* is one of the most striking and most important of the Renaissance. This is a brief analysis of the intellectual context in which the notion appeared. The *varietas* and *inventio* and *imitatio* were considered to be the ideal artistic forms. In his treatise, *Liber de arte contrapuncti* (Naples, 1477), Johannes Tinctoris gives one of the first meanings of this concept in the history of music. Its novelty comes, above all, from the fact that he chooses certain paradigms which in the new context and in the absence of other paradigms confer a new quality to the thought itself. In chapter VIII of his third book, Tinctoris explains how a composer of genius, or *concentor*, can reach this diversity and put the term *varietas* into practice by giving the scope of its application. The variety in quantity and quality appears in several songs, motets and masses and the longer the work the greater should be the variety. For Tinctoris, the concept of *varietas* is considered above all as a varied contrapuntal repetition.

In fifteenth-century music, the processes as well as the technical procedures of composition are formed by highlighting this concept. Among them, three principles of development are the most remarkable: colour, reduction and the technique of simultaneous variation. These principles enabled the composer to create variants of intonation on many levels: the variant of a motif within a melodious phrase, the variant of a phrase as a unit of structure and the variant of a melody taken in its whole development.

The existence of similar variants can be observed firstly on the scale of the internal structure of the same composition; then within the different works of the same composer and finally on the scale of the style of different composers of the same artistic movement.

The technique of writing music based on the concept of *varietas* also filtered through to the level of the *cantus prius factus*. Among the different technical procedures of development widely used by composers of this period we must also mention "imitation", *fauxbourdon* and the broad application of sequences.

The first creation of figures of musical rhetoric may be considered as one of the forms of *varietas*.

All these means of development enabled the composer to solve the problem of building a large musical form as well as that of musical "theme" and its evolution which constituted one of the major concerns of fifteenth-century composers.

**ILDAR D. KHANNANOV** (Peabody Institute of Johns Hopkins University, Baltimore, United States)

*Thematicism and form in op. 90 and op. 110: nostalgia for early Italian music in late Beethoven's Piano Sonatas*

Italian music of the Baroque period has played crucial role in the formation of the late style of Ludwig van Beethoven. His Piano Sonatas op. 90 and op. 110 present the essence of European musical thought. Remarkably, Beethoven has reached this depth not by means of active motivic elaboration but by simplification of texture and by bringing upfront the power and beauty of a human voice. And yet, the authors, from A. B. Marx to Richard Kramer, present this unique style solely as the result of incorporation of the musical ideas of C. Ph. E. Bach, W. A. Mozart and German tradition as a whole. Nobody seems to be interested in connecting Beethoven's *Alterstil* with national traditions outside Germany.

It is true that in a course of time German instrumental music has acquired the model of its own, derived from the rules of elevated musical speech (*Klangrede*), borrowed by Kircher, Burmeister and Mattheson from the rules of classical rhetoric. Beethoven in his *Alterstil* suddenly deviates from this path and transforms, or, to use the term of Darcy and Hepokoski, "deforms" the classical rhetorical disposition of the keyboard sonata cycle. The deformation is already evident in the primary theme of the Sonata op. 90, first movement. Its open harmonic structure presents a model which is more appropriate for the music of Monteverdi than for the necessarily circled and tight-knit structure of the regular primary theme. This deformation comes as a result of struggling with the material, just as many episodic elements characterize the *Toccatas*, *Canzoni* and *Fantasie* of Girolamo Frescobaldi. An episode, a lyrical, song-like arioso, appears on the crust of the wave of intensive harmonic development of the primary theme, as an alternative, as a bounce back or leap to the side, and as a remedy against grueling unidirectional development (suggested by Germanic, "teutonic" musical thought). The melody of this episode is so Italianesque that it has outlasted Beethoven's music and as such has become the symbol of Italian *bel canto* in instrumental presentations.

This paper will cover many more correspondences between Italian Baroque and Beethoven's late Piano Sonatas. The connections vary from thematic (quite obvious borrowing of melodic shapes and overall tone and mood), harmonic, textural and formal (following non-Germanic rhetorical models and formal-functional ideas). Milan Kundera suggests that Beethoven's late style was an attempt to cover the gap between the old and the new style. Edward Said notices that in the late style an artist is often trying to return to the past. This comes in agreement with our suggestion that Beethoven wanted to look back at the early stage of music, at its childhood and youth, which was for him, undoubtedly, the sunlit landscape of the Italian Baroque.

The formal concept of Franz Liszt's Symphonic Poems, which seems to be a synthesis of sonata form and sonata cycle, has been the object of research for a long time. However, there is still no consensus about the formal framework of the compositions and Liszt's own contributions.

The aim of this paper is to consider Liszt's four Symphonic Poems (*Ce qu'on entend sur la montagne*, *Tasso*, *Les Préludes* and *Die Ideale*) in the context of sonata cycles from the first half of the nineteenth century. I will analyse compositions which bear genre names such as *Fantaisie* (Fantasy), *Tongemälde* (Tone Painting), *Tondichtung* (Tone Poem) and which adopt a cyclic form [e.g. *Fantasie d-moll für Orchester* op. 9 by Sigismund Neukomm (1806), *Tongemälde für großes Orchester c-moll* by Aloys Schmitt (ed. 1823) as well as *Tongemälde. Erinnerung an die musikalischen Alpen* of Franz Berwald (1842)], to determine how far composers before Liszt had applied the aforementioned formal concept.

This shall prove that the formal idea was available to the composers of that time as one of the options for designing cyclical single movements. This finding assumed, the second section shall address the question how to characterize Liszt's handling of the concept of the cyclical sonata form. I will show in particular how in the Symphonic Poems mentioned above Liszt's treatment of the formal concept is motivated by the subjects on which the works are based.

All examples show an individual formal design open to the work poetry, realising a dynamic and open form design. In the third and last section, I will deal with the question of the origins of Liszt's own concept of sonata. On the one hand, we have to clarify the question in the thinking of the cyclical formal concept of his days, and on the other hand, we have to consider Liszt himself.

Since its creation, the reception of Shostakovich's Second Symphony has undergone various stages of aesthetic evaluation. Its first performances in Leningrad and Moscow were welcomed with enthusiasm [Khentova 1985, p. 190], but the subsequent Stalinist decades marked the turn: the symphony has been attributed the status of a formalist creation [Sabinina 1976, p. 58]. It retained its somewhat problematic reputation during the post-Stalinist years as well. Although the symphony no longer met a direct criticism, its proper artistic value still remained to be discovered [Sabinina 1976, p. 58]. The Second Symphony is titled *Dedication to October*. Its form is based on the popular dramatized concert performances taking place in Soviet Russia during the 1920s. Usually such eclectic performances were made up of several musical numbers which were loosely united by a revolutionary plot [Sabinina 1976, pp. 59-60; Akopyan 2004, pp. 55-57]. According to Akopyan, any of the most important formal sections of the Second Symphony can be linked to a certain stage of the scenario of the old soteriological (salvation) myths [Akopyan 2004, pp. 58-59].

Through the aforementioned sections representing different topic styles the symphony can also be linked with the classical four movement sonata cycle and one of its most well known deformations – the redemption paradigm. The latter usually refers to a certain narrative trajectory, in which the minor mode dominating most of the work is finally replaced by the major constituting a *telos* of the whole composition [Darcy 1997]. In Shostakovich's Second Symphony, the sonata cycle following the trajectory of the redemption paradigm is embedded within one-movement form. This in its turn links the form of the symphony with the concept of the two-dimensional (sonata) form [Moortele 2009], which allows talking about the legacy of Chopin, Liszt and other nineteenth-century composers.

The background of the voice-leading displays the structure of an auxiliary cadence [Laufer 1999]. Since the different parts of the symphony are written using different compositional techniques, the readings of the different parts of the symphony are based on different considerations. A motif understood in terms of Schenkerian analysis can emerge as an abstract entity being simply formed of the most salient tones of the upper ambitus of the quasi-aleatoric sound field, as a musical event on associative level, or as being formed of tones representing a certain structural level. Moreover, the musical narrative of the symphony as a whole can be described as a gradual process of motivic structuralization in which a motif usually passes three stages: abstract, associative, and structural. The process can be paralleled with the aforementioned emergence of a revolutionary consciousness, but also with the notion of entropy and crystallization developed by Jackson [2001].

Even today, heterophony lacks a clear definition. As Curt Sachs wrote in the *Musik in Geschichte und Gegenwart* encyclopedia [1957]: «In principle, the term heterophony suits almost everything between imprecise unison and strict double fugue.» Later, Rüdiger Schumacher, a German ethnomusicologist, even suggested renouncing the term itself, since too many different things can be meant [1999]. This, however, does not seem to be the best solution. Among others, Mark Kopytman, Israeli composer and theorist (b. 1929), suggested this definition in his extensive essay, *About heterophony* [2008]: «By heterophony we mean a texture that is built upon a simultaneous sounding of several variants of musical structures or their elements (sounds, patterns, lines, blocks)». This definition grants a rather wide space for composers' imagination and technical inventions.

Heterophony presents challenges for theoretic research:

- 1) The most obvious one is its diagonal dimension, with no commonly accepted signs for scoring. After 1945, various individual types of notation were suggested by several composers, including Witold Lutoslawski, György Ligeti and Mark Kopytman. Lutoslawski termed the combination of linear, vertical and diagonal components "aleatory counterpoint," Ligeti called it "micropolyphony," and Kopytman preferred to call his prevailing type of texture "heterophony." However, all three composers wrote their scores in a very detailed way, to achieve maximum control over the resulting sound.
- 2) In principle, heterophony lacks hierarchy, having neither *Hauptstimme* nor *Nebenstimme*. However, I would say that the heterophonic episodes also have their own dynamic of changes, and in each episode some type of heterophony prevails – whether melodic heterophony (echo-canons, isomelody, or oscillation, in Kopytman's terminology), figurative heterophony (where the fast tempo does not permit us to perceive the precise melodic contour), or an intermediate, mixed type (a combination, often simultaneous, of the two previous ones). In all three cases, we can often observe a short motive repeated and superimposed in an exact or varied way. I would suggest calling such motive a logo, or migrating logo of an episode or a composition.
- 3) Heterophony is rarely used as a texture of the whole piece, but usually coexists in correlation with other texture types. In some compositions, monody episodes may be perceived as analogues to the ordered sections, and heterophonic episodes as analogues to unordered ones. In such cases, the moving force of the piece is based on the dialectics of order and (a certain measure of) disorder.

In fact, Lutoslawski, Ligeti, and Kopytman took up a challenge common to twentieth century music and visual arts. Paul Klee, one of the path-breaking artists of the era, formulated in September 1914: «Ingres is thought to have ordered the quietude. I want, beyond the pathos, to order the motion».

In addition to his partly published and partly unpublished lectures, essays, and notes, the writings of Schoenberg were expanded in the last decade of the twentieth century, resulting from the discovery of a seventy-five page fragment *Coherence, Counterpoint, Instrumentation, Instruction in Form* – undoubtedly the longest theoretical opus since his *Harmonielehre* (Vienna, 1911), which Schoenberg had begun in April 1917, during his first attempt at formulating the twelve-tone theory. Discovered by Neff and Cross in 1994, this manuscript is of fundamental importance for our consideration of Schoenberg's twelve-tone theory. Within his first attempts of a twelve-tone method, the term "cohesion" (*Zusammenhang*) is central in the linking of counterpoint, instrumentation, form and harmony – discussed in separate treatises in the traditional teaching of composition. Thus cohesion serves as a bridge between tonal music and dodecaphony. The musical form emanates from the cohesion of tones, harmonies, and rhythms. Beyond that, from cohesion emerges the "musical idea" (*Idee*), which weaves through the entire theoretical discourse and compositional oeuvre of Schoenberg, including the twelve-tone music. Although the fragmentary manuscript, concerning the concept of cohesion, refers only to tonal music, and in that context includes a few musical examples with the decisively rather sparse theoretical discourse, this document contains vital remarks predicting Schoenberg's thoughts, specifically with regard to practical examples. Schoenberg's early twelve-tone compositions (op. 23, op. 25, op. 33a, op. 33b) are primary to the deliberations, since the composer creates compositions on the basis of a strict formal structure with recourse to a traditional contemplation of motiv, basic series, theme, repetition, alternation, change, and contrast, which, in spite of the strict application of the twelve-tone theory, fulfill the frame of reference for tonal music, with regard to unity, regularity and form. These works aspire to the term of cohesion, discussed in his *On the Teaching of Composition* included in *Die Musik* [May 1931] as the ultimate accomplishment in the compositional process. Schoenberg proves the extent of his dependency on the already formulated teaching of the concept of *cohesion* of 1917, as exemplified in a letter of 3 June 1937 from Hollywood to Slonimsky in Boston, in which he summarizes the path to "the method of composing with twelve tones", and suggests a connection between theory and practice in his early twelve-tone compositions. Schoenberg's teaching of the concept of *cohesion* and his closely related concept of *comprehensibility* (*Faßlichkeit*) was also placed at the forefront of Webern's understanding of theory and practice as a central premise of composition, on the one hand in his lecture series *The Path to New Music*, on the other hand in his own twelve-tone compositions, as for example in his op. 28.

A well-known peculiarity of eighteenth-century theories from Riepel to Koch, the distinction between “simple” and “compound” metres (such as  $\frac{2}{4}$  and  $\frac{4}{4}$ , not to be confused with the eponymous relation of  $\frac{2}{4}$  and  $\frac{6}{8}$ ) has recently returned to analytic practice. Moreover, the chief characteristic of the theory – the notion of a “real” measure inherent to the notes and not necessarily expressed in barlines and time signatures – has been embraced time and again, even without eighteenth-century influence, though often with the same focus on phrase rhythm and text setting.

These concerns guided the originators of the notion, especially Friedrich Wilhelm Marpurg, who imported the “simple-compound” distinction from poetry. From his point of view, notated bars were insufficient because they made no prediction about their equivalents in the text, the feet; in practice, a written bar of ode or aria could contain everything from four feet to half a foot. The redefined simple measure, on the other hand, normally corresponded to a simple foot, providing Marpurg with comparable and regularly linked units for the co-measurement of phrases and verses.

One can radicalize his approach and make its practicality yet more apparent. Strictly, neither bars nor feet, thus defined, were about the passage of time; while the simple measure was established by a succession of events in melody and harmony that could speed up or slow down, changing the duration of the bar, the simple foot was formed by word accents which might or might not occur at regular intervals (unlike their ancient relatives). Rather than physical time, these units gauged a grammatical process, a tonal development and an accumulation of sense; their parallelism in galant song allowed Marpurg to redefine the measure.

During my fifty years of teaching, I was brought to observe the singularities of the song *In naked voice*, so much by listening to improvisations and vocal inventions of children that I became very interested in the traditional song *In naked voice*, observable in the collections placed at our disposal by the ethnomusicologists.

Through an extensive listening work, it was possible to observe the crucial role of the “vocal gesture”. This one, indeed, underlies and structures melody progression. A strong theory was worked out, which makes it possible to guide the transcription and to propose an analysis.

Some sound examples, in relation to their transcription and the role of the gestural plays which guide them, will make it possible to evaluate the interest of this work.

As it is known, classic rhetoric constitutes an extraordinary in depth survey on discourse mechanism and structures. A survey that is definitely not theoretical, not limited to the relations that signs have among them and with their meanings, but conducted taking great care of the problem of persuasion (under an argumentative as well as an aesthetic point of view).

My starting point was Cicero and Quintilianus, then I moved to Heinrich Lausberg's work on them, which appears to be at the same time more abstract and aware of psychological consequences. The goal of my study is to verify if and how this rich apparatus, this way of facing the complexity of making-sense strategies, could be integrated into the compositional and analytic tools of twentieth century music. The core of my interest does not lie in the possibility (so often carried out) to exploit metaphors and analogies about *macroformal* aspects of music (i.e. *exordium, narratio, epilogus,...*), but rather in comparing the articulations of musical thought to those of verbal language within a *microformal* dimension. I think it is in this dimension that we find micronarrations, surveyable through a phenomenological analysis that would consider the emergence of sense within a structural framework in which the listener plays a fundamental role.

It is in the functional link between perception and narration, experience and language, that we can find the way to re-interpret the meaning of ancient rhetorical figures (such as *anaphora, antithesis, gradatio, hyperbaton, chiasmus,...*), which first drew attention on categories such as repetition, variation, contrast, order, disorder, symmetry and so on, thus showing their clear affinity with those processes of "making sense" peculiar to music. Among these categories repetition is, as Nicolas Ruwet's works remind us, one of the most relevant, and I treat it as the big mother of several conceptual articulations concerning both music and language. As to the figures based on a form of repetition and symmetry, one of my conclusions is that we should probably turn upside down the bridge between the two fields and state that these figures, these linguistic structures are, in their substance, founded on a sort of rhythmic gesture, where the logic pair repetition/variation displays itself with immediate clarity. Therefore these rhetorical figures seem to be akin to music rather than the opposite: it is through these gestures that language – and not only the poetical one – turns itself into something musical.

The outcome should not be the simple translation on another level of the formal and analytical conceptualizations already available. It is rather the possibility to provide the performer of this music – who sometimes feels himself/herself confused or, on the contrary, too much focused on technical and formalistic aspects – a net of "signifiers" able to orient his/her interpretative choices, able to make more persuasive the vocation to "say" that we meet in certain scores.

The objective of this research is to conceive a computational platform enabling detailed motivic analyses of individual pieces of music as well as large repertoires. This requires first of all a precise and systematised formalisation of the underlying heuristics.

The comprehensive and systematic musicological investigations led in the twentieth century with the help of linguistics and semiotics did not result in an actual constructive methodology. Refuting the Hjelmslevian belief in "immanent structures" that underlies neutral-level analysis, I propose an approach founded instead on an aesthetic perspective, and based on a modelling of listening processes and cognitive models such as Gestalt and memory. This results in a complex model, where many cognitive heuristics interact, developing further (and beyond) Lerdahl and Jackendoff's *GTMM*. Variability and subjectivity of individual listening experiences are understood as particular trajectories within a larger space of perceptible structures. Individual and cultural specificities are integrated through a variability of the model parameters and the modelling of specific cultural knowledge.

More concretely, the proposed theoretical and operative model of motivic analysis is funded on the Saussurian articulation between syntagmatic connections (that I propose to associate with the notions of continuity vs. discontinuity, vertical and horizontal synthesis, segmentation, Schenkerian ornamentation and reduction) and associative connections (related to parallelism, repetitions, similarities, learned patterns). Motives are discovered through progressive identification of successive notes and intervals along variable musical dimensions. Systematic motivic analyses draw detailed pictures of motivic variation. Melodic ornamentation and reduction/diminution processes are considered as the emergence of elaborate syntagmatic connections between local notes guided by purely perceptual rules as well as by memory – and culture – based associative connections.

This model formalises the emergence of pattern repetitions at multiple structural levels, such as short cells, motives, metrical structures, phrases, themes and long-range structures. Such computational model also allows the emergence of metricality and of complex structures, freeing the structural analysis from strong hierarchical structural and forced schemas.

This framework is currently implemented as a prototype computer platform. More practically, we plan to release in longer term a software for pedagogy and research that reveals a large spectrum of structural aspects in each piece and corpus of music. Advanced musicological applications will include the detailed bottom-up characterisation of styles and genres and high-level comparative analyses. A graphical environment is planned for the interactive score visualisation of the analytical results.

To analyse a work of art consists in penetrating the organization of this last one, in grasping its shape, in understanding it in its whole in a global and detailed way. It is also a question of defining it and of integrating it in a given style, even if it is the only example. Because it is tangible – and although this assertion about the musical work remains problematic –, the work of art as a “result” of the creative act shows psychic processes involved during the creative act. The style appears as a demonstration of the psychic determinism; it translates this ascendancy of the unconscious on the consciousness.

Music analysis has the same intentions as psychoanalysis: psychoanalysis allows to understand human psychic mechanisms; then the analysis of human work of art become clearer. Psychoanalysis extends the scope of our perception. By applying this reflection to the arts and to music in particular, I wondered up to what extent the determinism of the unconscious could influence the works of art and under which forms this creative unconscious could be revealed there.

As putting the unconscious in the forefront is one of the specificities of the turn of the nineteenth century, this study precisely applies to decadent aesthetics and modern art, whose main issue was to paint this interiority beyond objective reality. Furthermore, modernity seems to lie in the fact that the twentieth century work of art starts to disclose what classical art made it a rule to conceal: the traces of the elaboration work which enhance its power of expression.

We thus propose that the psychoanalysis helps us to increase our knowledge of Schönberg's works. We shall try to proceed in the same way as Freud in his *Interpretation of dreams*: understand the work in its whole (the manifest content) and then, go into details (the latent content). So, we emphasize the work of secondary elaboration in Schönberg's compositions after 1923, then we shall describe the consequences of the work of condensation and development in the structure of the work by using the psychoanalytical notions of overdetermination, of memory trace, of composite formations and intermediate work in dream formation.

We shall also see that the treatment of space and time is at the heart of creative act and psychic systems – the main problem lies in the fact that the temporality and the space of the unconscious do not seem comparable with their counterparts in our objective reality. With psychoanalytical facts, we shall often establish connections between the detail of a work and the creative act in its whole, to find the “substructure of art” (*Ehrenzweig*).

The aim of this paper is to analyse the relationship between music and emotion in Jolivet's *Cinq danses rituelles* (*Ritual dances*, 1939), according to what the composer used to declare in the 1930s: the renewal of musical language shouldn't be without keeping a strong expressive bond with the listener.

The composer longed for a “magic” music that could involve the listener and bring him to a spiritual renewal: in the *Danses rituelles* Jolivet explicitly refers to a primitive model of relationship between music and men. Jolivet abandoned tonality in search of a more “natural” musical language, but in doing so he gave up the most direct means to involve his listener; the case study discussed in this paper tries to answer the question of what could be called the “expressive renewal” problem: how is it possible to combine listening tradition and compositional experimentation? How can musical language be innovated without losing expression?

The analytical perspective I suggest combines a topic-oriented approach and a phenomenological one: the former is useful to study how traditional musical gestures are used and developed by Jolivet, while the latter focuses on perception processes (“affordances”, expectations, etc.). More generally, I think that this kind of analytical perspective should be put together with the study of compositional techniques in order to write an analysis-based history of post-tonal musical listening.

Analysing the *Danses rituelles* in this way means to detect topics and to study the expectations related to titles and musical gestures. The presence of rhythmic patterns related to dance forms (“primitive” ones, like the ostinato in the *Danse initiatique*, or popular ones, like tango in the *Danse du héros*) could be a way to balance the lost of melodic-harmonic expectations caused by the abandonment of tonality; but at the same time, rhythmic patterns constantly play with the expectations they generate along the piece, and actually create their own rule of perceptual answer. Moreover, expectations fostered by titles (the *affordances* of titles, following J. Gibson's concept borrowed to musicology by E. Clarke) sometimes clash with the actual listening. Finally, some “magic” and “primitive” elements are rooted in the intertextual net of Jolivet's late '30s production: the composer creates new topics that become recognizable (and so bonded to expectations) by their recurrence.

**LAURENCE LE DIAGON-JACQUIN** (Université Rennes 2, France)

*Wagnerian operatic strophic sources and Lisztian pianistic adaptations: the Spinnerlied and Senta's Ballad from The Flying Dutchman*

To promote the music by Wagner – who wasn't yet very famous – Liszt prepared transcriptions of his works. Most of them date from 1848-1861: 11 of Liszt's 15 piano two-hands Wagner transcriptions were written at this time. Sources include *Rienzi*, *The Flying Dutchman* and, above all, *Tannhäuser* and *Lohengrin*. Liszt's transcriptions aren't easy to play; they call for real pianistic ability. Furthermore, in many cases for Liszt, "transcription" meant "adaptation" or even "personal interpretation." In order to compare Wagner's originals with Liszt's transcriptions, I shall examine similarities and differences based on strophic form.

In 1860, Liszt adapted two pieces from Wagner's *Flying Dutchman*: an entire scene, the *Spinnerlied* (S440), and a single number, *Senta's Ballad* (S441). Liszt probably finished the adaptations only in 1872 before their publication in 1873. Liszt prepared no second version of these transcriptions, perhaps because the two pieces are linked dramatically in Wagner's opera: the first, sung by the young girls waiting for their fiancés, is followed by the second, sung by Senta as she dreams before the pale Dutchman's picture. In other of his Wagner transcriptions, including those involving *Lohengrin* (*Elsa's Brautzug zum Münster* S445/2 and *Lohengrins Verweis an Elsa*, S446/3) as well as *Isoldens Liebestod* (S447) from *Tristan und Isolde* Liszt remained faithful to Wagner's music, although he also modified those numbers in his own way as he did with *The Flying Dutchman* excerpts identified above.

This paper will examine Liszt's borrowings and his additions, the latter timbral as well as formal. Comparisons with other transcriptions from the same period will be illustrated using tables that identify specific formal changes. The characteristics of Wagner's strophic model will be compared with, and evaluated in light of, Liszt's piano pieces, which often retain Wagner's strophic character even when transformed through transcription. The objective is to show how Liszt appropriated for virtuoso piano performance and in his own manner two originally vocal and orchestral compositions. Comparing Wagner's originals with Liszt's transformations illustrates important aspects of nineteenth-century European musical content and style.

**RAPHAËLLE LEGRAND** (City University, London, Great Britain)

*Baroque architectures: Jean-Philippe Rameau and the musico-dramatic structures of French opera*

Born with Perrin and Cambert's *pastorale* (*Pomone*, 1671) and Quinault and Lully's *tragédie en musique* (*Cadmus et Hermione*, 1673), French opera combined the legacy of Venetian opera and French *ballet de cour* with the strong influence of the new classical tragedy. His musico-dramatic structures remains strikingly stable during almost an entire century and were more and more distant from Italian *dramma per musica*. The great break happened with Gluck's Parisian operas in 1774, although Rameau had already introduced some important changes within the system starting with *Hippolyte et Aricie* (1733).

The French musico-dramatic structures are based on the division of the libretto (acts, scenes, cues, lines). The macrostructure is formed by alternating recitative and choreographic scenes with a strong link between the prologue and the outcome in the fifth act. The placement of the few long arias (monologues) is also very suggestive. The tonal schema is given by the scenes, not by the arias or ensembles as in Italian type opera so it is possible to detect symmetrical or dissymmetrical tonal structures in relation with the intrigue and to compare the tonal schema of a large range of operas. The microstructure is also very particular with a large recitative encompassing a number of little arias and a distinctive use of the thorough bass, static or lively according to the melody and the meaning of the lines.

In my paper, I will examine *Zoroastre* (1749, 1756) in its macro and micro-structures in light of Rameau's theories and I will show how the composer re-elaborates the system, intermingling the elements of Lully's tradition in a more flowing and dynamic structure within a broader frame of tonality.

The dawn of the electro-acoustic music era in Poland is associated with the foundation of the Polish Radio's Experimental Studio at Warsaw in October 1957. The first autonomous piece created in the Experimental Studio in 1959 was Włodzimierz Kotoński's *Etude for one cymbal stroke*. Serialist treatment of "*concrète*" material is one feature specific to this work. In the *Passacaglia for 40 from 5* by Andrzej Dobrowolski, composed in 1960, old formal schemata is elaborated with material generated from five percussion sounds and transformed electronically into 40 musical objects.

These electro-acoustic works represent various sound explorations and – as was typical in Polish works labeled "sonoristic" – treat timbre and texture as structural elements of composition. In 1976-78 Józef M. Chomiński created a unique theoretical system that systematised sound phenomena of twentieth-century music. It is based on five fundamental ideas. They correspond to different aspects in the realisation of "sound transformation", which is fundamental to sonoristic technique. First, "sound material" and the processes of its modification are identified. The "regulation of time and speed" reflects the temporal organisation. "States of density and rarefaction of sound" concern all the issues related to harmony, counterpoint and instrumentation in traditional music theory. Furthermore, "sonoristic modulation" explains the methods for sound manipulation by the technical equipment of the time. Finally, the formal question addresses the sonoristic effect upon structural levels and the work's construction.

Chomiński's original theory was based solely on notational approach, and I propose, as an extension, an analytical model in which the acoustic shape of the works is taken into consideration. The analytical framework has three points of reference: the recording, its spectrogram and the score. The recording is a point of departure. Next, the spectrogram and the score are used in conjunction with the listening experience in order to identify and define aurally distinguished sound shapes and their functions.

The purpose of my paper is to show, with reference to early examples of Polish electro-acoustic music, the manner in which aural evidence confirms that Chomiński's theoretical ideas illustrate the dominant role of timbre and texture as well as the emergence of "sonoristic values". My analyses furthermore substantiate that manipulations of sound in electronic music represented Chomiński's ultimate ideal for the sonoristic technique, since they are able to affect the very nature of the sound material and its constitution. Moreover, in the theoretical landscape of the twentieth century, Chomiński's "sonoristics" can successfully complement other descriptive and analytical approaches to electro-acoustic music.

Against the music-philosophical background of the aesthetic of late works developed by Adorno in his book on Beethoven, and his concept of the constellation, this lecture intends to follow the trace of an *enigmatic sound constellation* in Beethoven's Fugue in C♯ minor op. 131, I. The music-theoretical examination of this sound constellation resorts both to the multi-dimensional, yet unsystematic "chord concept" of an analytical approach drawing on "historically informed" music theory and the more recent discourse of "models" and "topoi". This automatically raises the question of how far one can reconcile the historical investigation of compositional aspects on the one hand and Adorno's emphatic understanding of late works, and artistic works as such, on the other hand. This applies especially to such music-aesthetic categories and complexes as the riddle character or the relationship between convention and subjectivity in Beethoven's late works. The aim is by no means to relativise, let alone "unmask" the enigmatic; rather, the lecture attempts to pinpoint, by music-theoretical means, the special quality of "beautiful", or rather "enigmatic passages" precisely in their multi-layered and ambiguous character, and to highlight that aspect which constantly changes and eludes the analytical grasp of the observer.

As paradigm for this ephemeral and changeable character, a certain chord will be examined, which occurs always in relation to the four-tone structure of the fugue's subject, but whose figure sometimes differs slightly. Its embedment in various contrapuntal, harmonic, rhythmic and metric contexts evokes different possibilities of harmonic interpretation. Therefore in this context it seems more appropriate to use rather the notion of a "constellation of possibilities" in the sense of an abstract sphere, which constitutes the background for the concrete phenomena. Each occurrence of the chord represents the constellation of possibilities, according to that which Adorno would call a sign standing for a type or category.

This chord as a *Klang* configuration is also comprehensible as a simultaneous coincidence and dissociation of the vertical and horizontal dimensions. In addition it reflects some of Adorno's observations concerning general characteristics of Beethoven's late style like the dissociation of parameters and the tendency to concentrate, contract and fragment.

Furthermore the one-dimensional concept of chord of post-Ramellian theories turns out to be inadequate as a suitable means of analysis. Therefore, apparently well-defined terms like "chord", "dissonance" and "counterpoint" have to be reflected critically once again.

**GERHARD LOCK, KERRI KOTTA** (Estonian Academy of Music and Theatre, Tallinn, Estonia)

*Perceiving, conceptualising, and measuring musical form and tension in contemporary symphonic music by Erkki-Sven Tüür: a preliminary study*

In the analysis of classical music, form (as one of the basic features accessible both visually in the score and auditively in aural analysis) is usually seen as a static entity, which can be described through certain formal models such as sentence, period, small ternary, etc. Musical tension and relaxation as aspects of musical form are described either structurally [music analytical approaches, Hutcheson 1972, Leichtentritt 1979, Kirschbaum 2001] or within the framework of harmonic prolongation [combining music theoretical and cognitive approaches, see Lerdahl-Jackendoff 1983, Lerdahl 2001]. In twentieth century music, however, the form is being increasingly interpreted as a process and temporal *Gestalt* [see Tenney 1980, 1969-1970, 1986/2000; Roeder 1995; Deliège, Mellen, Stammers, Cross 1996; Frisius 1998; Kotta 2008; Mailman 2010]. In the domain of empirical music cognition there are several approaches of perception of form in tonal [Krumhansl 1996] and in post-tonal music [Deliège 1989, Baroni 2003] which focus mostly on concepts of segmentation and hierarchical or sequential listening [see Lerdahl-Krumhansl 2006].

The main idea of the following paper is to describe form as a process taking place in time through musical tension. The musical tension is a complex phenomenon which – formally speaking – has not been described yet in a satisfactory manner and is often related to concepts of stability and instability, beginning and ending, segmentation, narrativity, force and motion, goal directedness, and cognitive meaning connected to bodily experience. The following study is a preliminary case study combining theoretical and empirical methods [based on Lock-Valk-Falk 2008, Lock 2010] within the dissertation project of the first author developing a theory of tension design. It compares the score with the continuous slider controller data (recorded by a Max/MSP-based program designed by Hans-Gunter Lock) derived from the perception tests with seven participants listening to the one movements' 4<sup>th</sup> and 6<sup>th</sup> Symphony of Erkki Sven Tüür (\*1959). The perception of musical tension of the listeners is described through formalized and normalized graphs. The graphs are segmented into simple parts so that the beginning of each part coincides with the point where the curve starts to rise again. The segmented graphs are then subjected to a reductional analysis based on the connection of their nearest (or next to nearest) high- and low-points. These are taken as a basis against which the different approaches based on the theoretical studies mentioned above are tested and the best methodology for the analysis of the tension are developed.

This method assumes that the development of musical tension of western classical and contemporary music can be described by a rising and falling slur comparable to the culmination-development model of Kirschbaum [2001]. The latter includes a rising phase, a climax point or/and a culmination area. In the present study, the model is complemented with a decreasing phase. The aim of this paper is to present a preliminary comparison of the score-based analysis with the perception-based analysis.

**ANA LOMBARDÍA** (Universidad de La Rioja, Logroño, Spain)

*Mid-eighteenth-century violin sonatas composed in Madrid: Corelli's op. 5 as a model?*

The sonata for violin and accompaniment was first introduced in Madrid around 1680. The Royal Chapel was central in this process due to the increasing hiring of Italian violinists during the period 1680-1750. However, scarce musical sources dated before 1730 and containing violin works composed in Spain have been located to date. In contrast, the number of copies of Corelli's *Sonate a violino e violone o címbalo op. 5* (Rome, 1700) found in the country is becoming substantial (23 sources dated from 1709 to 1810, so far), attesting a rapid and remarkable dissemination of the set.

Although the process of assimilation of the violin sonata in eighteenth-century Spain is virtually unknown to date, there is sound evidence of the consolidation of the genre in Madrid from 1750. In fact, seventy sonatas by twelve different authors established there in the period 1750-1770 have been preserved. Interestingly, about half of them were created by violinists-composers educated in Madrid from the 1730s, such as José Herrando (ca. 1720-1763) and Juan de Ledesma (ca. 1713-1781). Given the context described above, it is very likely that Italian violin practices, and especially Corelli's op. 5, played a central role in their education.

Despite the high interest Corelli's solo set has aroused in musicological studies, it is not clear to what extent it constituted a compositional model or just a pedagogical model. In the case of Italy, Corelli's op. 5 was not generally taken as a formal reference by the next generation of composers, who tended to use a three-movement pattern including binary forms with a reprise of the opening – which is rarely found in Corelli's output. Yet a study by Franco Piperno shows that Corelli was highly innovative and influential in terms of instrumental technique compared to his Italian contemporaries. This type of approach, which could be called "idiomatic analysis", is not limited to specific technical matters, but is intertwined with compositional issues such as the shaping of small-scale structures within movements and even with aesthetic choices. Therefore, it becomes essential to the understanding of solo genres, providing a complementary view to formal analysis.

This paper aims to present an idiomatic analysis of the solo sonatas by Herrando and Ledesma, which will be compared with Corelli's. Modeling on Piperno's study, the focus is not just *what* patterns are used but also *how* they are placed in the work in order to fulfill both technical and musical needs. As a case study, a selection of fast first movements and variations will be surveyed. As the paper shall show, whereas the Spanish sonatas diverge with Corelli's in formal aspects, their varied writing reveals a deep understanding of the violin technique, seemingly reflecting the assimilation of Corelli's strategies. Furthermore, Herrando and Ledesma developed a personal usage of some of the technical devices then recently introduced in Spain and, eventually, created their own proposals.

The first difficulty we face when we focus on the analysis of concrete, electroacoustic, and acousmatic music lies in the materiality of the work. From the work recorded on a medium (tape, compact disc, computer memory), the analyst must, in the absence of partition, find survey techniques and scoring ways to address analysis.

If there are tools to describe sounds like the Schaefferian typo-morphology or the I-son concept of François Bayle, there are also methods for analysing such works as the semiotic approach and analysis from UST Temporal Semiotic Units. With regards more specifically to the analysis of space, tools of description and analysis exist: the spectro-morphology of Denis Smalley, and the spatial topology of the forms defined by Roland Cahen and the notion of internal morphology of space by Pierre Couprie.

However, when we focus on the electroacoustic repertoire multiphonic (that is designed to support music for more than two tracks, including space as a determining factor in the writing of the work), the analyst is very helpless. A tool such as the *Acousmograph* can't serve in this case.

In this paper I will focus on studying the selected works: *Etude S.* (François Do-nato), *Jardin public* (Christian Zanési), *Formes et couleurs de la vie* and *Scènes de la réalité plus ou moins quotidienne* (Jean-Marc Duchenne). This will query the content, to probe the processes of composition, to focus on the implementation of the musical program. We will focus our attention to the poetics of the work.

The first step is a survey of event music, sort of mapping out where it will appear in a schematic way and so very personal sounds or decisive evidence collected by the analyst. This graphical representation, the result of the interpretation of analytical listening, is quite subjective. However, it can highlight recurring items, rehearsals and sometimes see an aggregate form. It is also possible to use screen shots and make the records sound when the work is composed on a direct device to disk. In this case, it appears the details of the work (samples, details of each track ...) sounds are represented by wave form. From screenshots sessions of works composed on *Pro-tools*, for example, it is possible to approach the analysis of real space, space positioning, including the visualization of different tracks and their location. Thus, the localization of sound elements, the analyst can identify simulations of movement, displacement.

Then, with a multidimensional representation, the analyst offers an additional tool for the rating of locations in a concrete way. Using a three-dimensional diagram representing the concert hall with the implantation of the device, we can propose a multidimensional representation to locate in the space of the room, the actual space of a sound event at a specific time. This is a snapshot taken on a longer or shorter. The time scale can be specified and multidimensional representations can be linked together to provide an overview of the course time and space.

From the analysis of extracts from the repertoire multiphonic, we will show the possibilities of analysis of the writing space offered by the tools presented and we will define their limits.

A recent trend in Venezuelan music merges traditional folk genres and Baroque or Renaissance classics into unique fusion compositions. The pieces exploit musical similarities between a specific traditional composition and a European classic. The central challenge for analysing them lies in recognizing the ways in which the presence of each source work transforms the other, not just by modifying harmony, rhythm and form, but also by placing each in dialogue with a non-native culture. My paper engages a specific work, entitled *Polo Barroco*, recorded in 2001 by oboist Jaime Martinez and the Ensemble Gurrufio. It intertwines parts of Marin Marais's variation set on *La Folia* – arranged for oboe, *cuatro*, maracas and bass – and an original set of variations on the *Polo Margariteño*, a folk genre associated with Venezuela's Margarita Island.

1) Harmonically, *La Folia* nests the relative major between i-V-i in the tonic minor. The *Polo Margariteño* moves repeatedly from the tonic major to the relative minor, returning to the tonic major at the beginning of each new verse. This harmonic kinship allows each of the two source works to emerge effortlessly from the other, an effect that is enhanced when thematic distinctions are mitigated by parallel diminution techniques applied to both themes. It also facilitates a transforming juxtaposition of Marais's second *Folia* variation when it emerges over the antepenultimate e-minor chord of the first *Polo* variation, enacting what feels like a large-scale pre-dominant prolongation within the *Polo*.

2) Marais's piece projects a clear triple metre throughout all but two of the 23 variations. The *Polo Margariteño*, like many Venezuelan genres, is anchored metrically by the *cuatro*, playing a pattern that hovers between simple triple and compound duple metre by presenting an eighth-quarter rhythm twice per measure. While Marais's setting of *La Folia* can accommodate itself to a two-measure *cuatro*-rhythm accompaniment like that used in the *Polo Margariteño*, doing so disturbs Marais's stately triple metre on at least two levels. First, the shorter rhythmic cycle of the *cuatro* divides the *Folia* measure in half, and second, the *cuatro*'s ambiguous subdivisions further divide the half-measure into either three or two parts. The *cuatro*-rhythm's persistence in *Polo Barroco* also creates a permanent multilevel hemiola that allows for rhythmic manipulation in multiple strata.

3) The *Polo Barroco* assimilates the strophic processes of both source works, and their narrative variation trajectory, into a large ternary form, by making use of key changes, composed transitions, and the thematic-harmonic contrast between *Polo* and *Folia*. The first large section is expository, the second is developmental, and the third provides a triple return – theme, key and lead instrument. The synergy between the variation narrative and the overarching three-part form creates a complex and compelling structure for the *Polo Barroco* that neither source piece achieves by itself.

4) Beyond harmony, rhythm, and form, there are a number of issues raised by the combination of the two source works. These include the way the piece suggests an historical narrative about the origins of the *Polo Margariteño*, and the reverse appropriation that imports classical elements into a folk genre. I examine these and other issues by drawing upon musical evidence within the piece and conversations with the composer.

**MARCO LUTZU** (Università di Roma La Sapienza, Italy)

*Understanding (thanks to) the relations. An analysis of the Oro Seco with musicians*  
in PANEL: *Dialogic analysis*

In the second half of the 1950s Mantle Hood theorized the concept of bimusicality, an expertise which the ethnomusicologist has to develop by learning the musical language he/she is interested to, in order to understand music as a «physical, psychological, aesthetic and cultural phenomenon» [Hood]. In the 1990s Richard Widdess was one of the first who thought about the benefits of a collaborative approach which involved the performers in the work of transcription and analysis of a musical performance.

Starting from recent considerations on this subject, I will focus my paper on the relevance of learning to play an instrument as a component of field research methodology and the epistemological value of the analysis conducted together with the musicians.

According to the research on *History and Analysis of Musical Cultures* which I carried out at the PhD at the University of Rome “La Sapienza”, I will propose the analysis of a *toque* of the *Oro Seco*, one of the rhythmic patterns performed on *batà* (three double-head drums of different sizes) at the beginning of one of the several ceremonies dedicated to *orichas* (deities) in Cuban religion *Regla Ocha* (more commonly known as *Santeria*).

The aim of my paper is to show how the music practice and the dialogic approach with the musicians have been of fundamental importance for the analytical work. Moreover, I assume that “thanks to the relations” (between the researcher and the performers) it is possible to improve the understanding of “the relations” (between the three drums).

**IGNAZIO MACCHIARELLA (chair), PAOLO BRAVI, MARCO LUTZU,**

**MASSIMO RIZZO** (Università di Cagliari, Italy)

PANEL: *Dialogic analysis*

Quite often ethnomusicologists have to confront their theoretical knowledge with different conceptualizations concerning music structures – besides different cultural meanings and values of the “organized sounds” within social life. Results of different music intentionality, any formal feature that is recognized in a music performance by the scholar could be otherwise conceived, as well as criteria of music segmentation shared by local performers could be not immediately determine understandable by external listening. Especially in the recent literature of the discipline, various approaches are usually employed in order to document and interpret the extreme, imponderable (often odd) variety of music conceptualizations, by means of various tools, devices, field tests and so on.

From Mantle Hood's [1960] theorization of *bi-musicality*, various analytical approaches consider that the ethnomusicologist directly learns and takes part in the musical practice he studies; integrated approaches are pivoted on the acquisition of local actors' music notions by means of feedback coming from the re-listening of a music outcome with people who performed it, or from different experimentation.

Beyond the distinction between “etic” and “emic” points of view (that has been questioned by the interpretative anthropology), more recent approaches set out to dialogic ending through a deep negotiation between scholar and local actors to reach a shared understanding. Like a polyphonic discourse where the different points of views intertwine toward the blending of the respective socio-cultural horizons, the dialogic approaches could contribute to analytical aims, inter alia, widening the comprehension of sound elements: that's the topic of our panel proposal.

Through different case studies, we will deal with the enrichment of the analytical tools coming from dialogical approaches, above all in the perspective of a concept of “music as performance”, more than “music as text”.

*A performative concept of chord*

in PANEL: *Dialogic analysis*

In my paper, I will deal with some theoretical issues concerning the dialogic approaches in an analytical perspective, in the light of a large monograph on a multipart singing practice in a Sardinian village that I wrote “in ten hands” with four traditional singers.

Particularly, I will focus on the basic concept of chord that is the heart of the multipart practice that I analysed: at first, I will show the starting different points of view between my “grammatical perspective” and the experiential approaches of my co-authors, then I go over the negotiation process to reach a shared definition of the concept. I will end with suggestions for further extension of my analytical experience.

*Musical analysis as stage direction? A reappraisal of the relationship between analysis and operatic staging*

There is growing consensus in recent opera studies that the score is less an objective musical text isolated from its staging contexts than a script that requires theatrical realization. Yet in much of opera scholarship today there remains the assumption that a work's dramatic conception is articulated through an idealized collaboration of music, dialogue and stage directions that is recorded in the score. Accordingly, intra-textual relationships are prioritized as determinants of dramatic meaning: a musical-textual relationship (discovered through analytical observation) suggests or confirms a dramatic relationship (awaiting stage realization).

By contrast, contemporary operatic productions often juxtapose the unchanging musical and verbal texts with radical changes to the staging, thus altering the work's original dramatic conception and opening it up to multiple interpretations. They problematize the relationship between text and act, and challenge the priority of intra-textual signification in theatrical discourse.

The following questions arise: to what extent, and how, can music analysis meet the challenges raised by contemporary operatic staging? How might the conceptual gap between the academic and practical perspectives of operatic dramaturgy be mediated? What is an appropriate theoretical model for the relationship between music, words and stagecraft that can account for both conventional and radical interpretations of operatic works?

The present paper attempts to address these questions with reference to scenes from Mozart's *Don Giovanni*. While we believe that both musical analysis and staging practice involve the exploration of dramatic relationships in opera, and that such dramatic relationships must be consonant with the musical score, we also believe that the model of “idealized collaboration” does not sufficiently account for the complexities of theatrical practice. First, although musical-textual analysis may suggest a specific dramatic insight, it cannot account for the fact that this interpretation may be physically enacted in different ways – and that these differences, inevitably, introduce variations to the dramatic interpretation at stake. Second, and more crucially, we contend that the same musical-textual relationship may be structurally analogous to, and thus may be suggestive of, multiple dramatic relationships, and these in turn will propagate an even greater variety of theatrical realizations. Video excerpts of different productions of *Don Giovanni* will be used to illustrate these points.

In conclusion, we propose a new model for opera analysis that takes into account the multivalent nature of opera dramaturgy. The score is seen both as a starting point and as a site for dramatic exploration. We believe that this model would not only provide a more sensitive contextualization of analysis within theatrical practice, but would also accommodate the challenges that contemporary productions have posed to the canonicity of the operatic text.

There is a semantic feature in *Jeux*, currently neglected by the relevant literature, that deserves to be investigated with analytical methodology: the problem of the ties between music writing and the erotic sphere.

This point requires careful consideration not only because the subject of Nijinsky revolves entirely around a *ménage à trois*, but also because the reviews of contemporaries very often resort precisely to an erotic lexicon to describe the music of *Jeux*. Therefore the question to ask is: how does Debussy transcribe the sensuality staged by the ballet?

Certainly the syntactic discontinuities and short melodies are aligned to that collective semiology of amorous discourse so clearly highlighted by Roland Barthes (*Fragments d'un discours amoureux*). However, there is a parameter (currently neglected by the relevant literature) that can help to clarify the individual semantic imprint of *Jeux*: the harmony.

The analysis of the score shows the systematic refusal of a single centre of gravity, a constant overlap between two simultaneous tonal or modal elements, and a frequent stratification between different pairs of scalar identity. Debussy tends towards a harmonic bipolarity that reveals a particular characteristic of *Jeux*: the whole score flows without a predominant tonal (or modal) centre, according to a composition process much less exploited in previous works (from *Prélude à l'après-midi d'un faune* to *La Mer* the principal thematic elements, despite an ongoing search for nuance, are always linked to a main harmonic identity). This characteristic could be related to the erotic bipolarity of the subject, awakening in a subcutaneous layer of the score that «*volupté à plein bords*» that Debussy spoke about during the development of the work [Correspondance 1872-1918, p. 1543].

The present paper is part of a wider research project aiming to verify the relevance of the concept of "mode" in Medieval and Renaissance polyphonic music. Until now, the authors have dealt with some significant sacred collections by Lasso and Palestrina, showing that in such cases the concept of mode itself doesn't lose its analytical and hermeneutic values; on the contrary, its validity is still intact, and even reinforced. This paper marks another step in the research: an investigation about tonal organisation of Italian Trecento music. Clearly, this implies a different methodological approach and suggests different directions.

The most recent researches about fourteenth-century polyphony have already questioned the relevance of the idea of mode, particularly with regard to French *Ars Nova*. As Sarah Fuller has convincingly argued, in Machaut's music the upper voice, which normally is the leading voice, follows criteria of tonal organization which do not seem to be "modal" in the traditional sense of the word; to be able to give a reliable account of the sound organisation of a piece, Fuller suggests therefore to consider its temporal development and inner direction rather than to observe it under the lens of a pre-given paradigm. Daniele Sabaino's analysis of Landini's ballata *Contemplar le gran cose*, which moved from a different perspective, confirmed the productivity of such a procedure.

A first investigation of tonal organization in Niccolò da Perugia's output and a group of other compositions chosen for the sake of comparison has pointed out the following traits:

- 1) a significant presence of compositions ending on A and C, that is on degrees falling outside the range of traditional modal finales;
- 2) the leading role of the upper voice, suggesting the opportunity to read all sonorities from top to bottom, and not from bottom to top as usual;
- 3) the need of defining specific segmentation criteria allowing the identification of cadences even independently of the lyrics, given the nature of autonomous phrases leading to several melismatic passages, particularly within madrigals;
- 4) the lack of any evident criterion in the choice of internal cadence degrees.

In order to define proper criteria for the identification of the internal cadences, the present authors have taken into account the most common definition of coeval theory ("a perfect consonance approached from the nearest imperfect consonance") as well as the nature of formes fixes that characterizes the outline of both ballatas and madrigals.

In the paper we will present the (provisional) result of the investigation of the repertoire of two-voice ballatas and madrigals (because the presence of a third voice, either free or canonic as in the caccias, raises questions that deserve further investigation).

*Nikos Skalkottas's Largo Sinfonico (1942–44/46/49). Composing with a superset: unity and diversity in the construction of the musical space*

Nikos Skalkottas (1904–49), perhaps the last great “undiscovered” composer of the twentieth century, is an individual and enigmatic figure in the Western art music canon. In his essay *The School of Modern Composers* he stated, «Every composer can have his own school», and true to this belief he created his very own, private “school”, one characterized by an unusual stylistic breadth. Throughout his career he explored and integrated several contrasting musical idioms and styles (tonality, atonality, dodecaphonism, neoclassicism and folklorism), and traditional and avant-garde elements effortlessly coexist in his works. However, his major achievement is his imaginative approach to dodecaphonic composition, manifested through his development of his own version of the twelve-note method. Although Skalkottas never abandoned tonal composition, the vast majority of his surviving works use predominantly twelve-note idioms. It is perhaps because of the wide range of his output that the subtleties and evolutionary stages of his dodecaphonic technique have not been widely understood. Yet, deciphering and mapping out the technical parameters of this technique is necessary for any informed future discussion of Skalkottas's dodecaphonic music and its historical and theoretical contextualization.

This paper offers a reappraisal of Skalkottas's twelve-note compositional practices. It presents concisely both the structural features of his twelve-note compositions and contextualizes the development of his dodecaphonic technique. It also provides a study of one version of his free dodecaphonic technique, with particular emphasis on the *Largo Sinfonico* from his *Second Symphonic Suite*, which epitomizes his conception of musical space and twelve-note composition. It predominantly concentrates on the interrelationship between the multiplicity of pitch-class material, harmonic rhythm and texture to determine its harmonic and formal structures.

The piece, characterized by expansiveness and a multidimensional arrangement of numerous clearly defined pitch-class materials, is built on a superset consisting of 16 different but closely related twelve-note sets. Similar to the hexachordal partitioning of an ordered twelve-note series, the superset is partitioned into two halves of eight sets each, with each half delineating formal sections.

The formal design of the *Largo Sinfonico* combines a set of variations with sonata form, typical of Skalkottas's synthesis of antithetical formal prototypes. Orchestration, textural change and part-writing have important articulating functions, and, together with set repetition and thematic-melodic gestures, these frame the variations and outline its hybrid form. Furthermore, this form is underlined by the harmonic rhythm (that is, the change of speed of set rotation within a variation), which produces waves of tension and relaxation and controls the ebb and flow of the music during the unfolding of the piece.

*Horatiu Radulescu and the primordial sounds of Romania  
in PANEL: The boundaries of the spectral subject*

As the eccentric musical adventures of Horatiu Radulescu gain recognition beyond the small circles of avant-garde music aficionados, a world of traditions and sounds mostly foreign to the western ear are gradually uncovered. Radulescu's sonic gestures and the temporality of his music are inextricably bonded with the ancient traditions and rituals of the Carpathian Mountains, where musicians and artists still preserve a mystical relationship with nature. In these lands, the flow of time seems to have no discrete entities. For Romanian peasants and Radulescu alike, the essence of music-making lies in simply allowing the energy of sound and its spectrum to flow.

Placing Radulescu's music in the wider European context of spectralism is not an easy task. Although many composers share an interest in exploring sound and its overtone series, disagreements occur when discussing the existence of a coherent “Spectral Movement.” In Europe two major paths have gradually emerged: the French have generally researched and “applied,” while the Romanians have mostly meditated and provoked. Beyond the difference in ethos between the two cultures, a number of objective factors establish a wider context for these two directions: the cultural politics of France have allowed Grisey and Murail to seek answers in relative union, while the Iron Curtain isolated Horatiu Radulescu from his colleagues early on, in 1969.

This essay situates Radulescu's music in the context of the Romanian post-war avant-garde by tracing its origins back to experiments and musical practices shared by an entire generation of innovative composers, such as the Bucharest-based composers Corneliu Cezar, Octavian Nemescu, and Iancu Dumitrescu, who employed spectral techniques of composition as early as 1965. But this study devotes attention to presenting folk traditions, traditional instruments and unusual performance techniques that influenced Radulescu throughout his life. The use of “ison” (drone), folk instruments and *Vioara cu goarma* (horn violin), as well as performance techniques involving *Tipuri-turi* (high pitched singing) are only a few of the distinctive Romanian folk influences to be found in works like *Das Andere* or *Clepsydra*.

At first sight, the neophyte may be tempted to discard Radulescu's ideals as utopian. Broad performing forces and devices are often called for, for works that can be rarely performed in established concert series, due to their extensive length. His scores involve original notation symbols that can be challenging to decipher even by the most devoted musicians. Despite his humour and colourful personality, Radulescu himself was often outspoken when it came to new music affairs. By unearthing the ancient origins of his sonic gestures, this essay seeks to reveal the unique facets of Romanian spectralism, and to provide the Western listener a more refined context for his music.

*The cyclic conception of musical time in Luigi Nono's Post-Prae-Ludium n. 1 "per Donau". An aesthetic-cognitive-perceptive analysis*

The present contribution is focused on the analysis of Nono's *Post-Prae-Ludium No. 1 "per Donau"*. Both for its temporal placement and its compositional conception, *Post-Prae-Ludium* should be considered as a key piece concerning the evolution of the interaction paradigm between composer, instrumental performer and live-electronics' performer. The interpretation of the analytical data brings out that Nono adopted a cyclic conception of musical time put into effect through techniques such as fragmentation, defocusing and anamorphosis applied to musical materials at micro-formal and macro-formal level. The sound events have been investigated in the following three domains:

- domain of texture, the course of pitch parameter

graphic representation on xy plane (*sonogram*)

x = time (sec)                  y = frequency (Hz)

- domain of form, the course of amplitude and frequency parameters

graphic representation on xy plane (*spectrogram*)

x = frequency (sec)                  y = amplitude (dB)

- domain of timbre, the connections between previous parameters with reference to spectral components

tridimensional representation (*3D surface*)

x = frequency (Hz)                  y = amplitude (dB)                  z = time (sec)

The classification of sound events has been structured consequently to the one proposed by Schaeffer and completed by Chion's and Delalande's contributions, which identifies three types of sound event: continuous, iterative, impulsive. The macro-segmentation was carried out according to Delalande's analysis of listening behaviours. The investigation of internal articulation of sound events starts from Smalley's theorization and identifies three typologies of sound events: noise (chaotic texture); node (the texture is more complex than one single pitch); note (one single intelligible pitch).

The tridimensional elaboration allowed the access to the concepts of *motion*, *texture* and *gesture*. The structural motions were subdivided, following Smalley, in two typologies:

- directional, characterized by a form developing in time through well-defined points, like straight and curvilinear motions
- multi-directional, characterized by lack of focusing towards a target  
conflation (dispersion in fragments);  
diffraction (crystallization in bands).

For what concerns the definition of musical structures in terms of gesture and texture, it was possible to indicate two different typologies: gesture-carried structures; texture-carried structures.

The present analysis was conducted on the studio recording (January and February 1993) published on CD by Artis Records, featuring Giancarlo Schiaffini, tuba and Alvise Vidolin, live-electronics.

*Ondioline magnetic tapes, revox recorders and techniques of notation in the music of Giacinto Scelsi*

This project aims to study two tapes stored at the archives of the Fondazione Isabella Scelsi of Rome, containing some improvisations of Giacinto Scelsi. In particular, we recognize *Pezzo sulla nota Fa*, from *Quattro pezzi per orchestra* (1959), and *Xnoybis* for solo violin (1964). These are two very representative compositions of Scelsi's aesthetics [G. Scelsi, *Il Sogno 101*, Macerata, Quodlibet, 2010]. It's well known: he composed starting from his own improvisations. The composer recorded and edited it on magnetic tapes after arranged by practitioners. The most important of them was M° Vieri Tosatti. In particular he arranged these two tracks adopting two different scoring systems. These systems were functional to obtain for the solo instrument, or the ensemble, a "sound" as close as possible to the tone of the composition as heard from the tape.

We described the two compositions' structures [G. Castagnoli, *Suono e processo nei Quattro pezzi per orchestra (ciascuno su una nota sola)* (195[6]) di Giacinto Scelsi, in *Quaderni di Musica Nuova*, 1987, n. 1, pp. 87-106] and compared tapes with scores.

Any audible effect on the tape is perfectly translated by notation. For *Pezzo sulla nota Fa* the notation system is conventional and includes solutions to indicate the quarter-tone. The ensemble arrangement renders in a truly masterful tone the *Ondiola*'s very poor sound. For *Xnoybis* the extreme differentiations of sound is achieved by adopting a particular scoring system. The single instrument uses here up to four systems of notes: different staves determine which string of the violin should be played for a particular pitch. This method of notation was adopted by Vieri Tosatti for other arrangements of Scelsi's music and probably reached its climax with Quartet n. 4 (1964).

This study is part of a research project dedicated to the pairing Scelsi/Tosatti. The aim is to understand something more about the particular genesis of Scelsi's music. The problem has been subject of never quite dispelled a controversy.

**MARIE-NOËLLE MASSON** (Université Rennes 2, France)

*Music and language: prolegomena for a compared study of their articulation in vocal music*

Nicolas Ruwet, that's well known, made a very relevant analysis of the relations between text and music in vocal music. His works led to a conclusion we have to keep in mind: in vocal music, the articulation between speech and music happens without their losing their peculiar organisation. Neither speech nor music fails or can lose their inner properties, as systems, to advantage of the other, because «whatever the purposes, among the numerous ways to structure the sound continuum, speech language and music language remain in different levels and can be simultaneously realised without interferences».

This distinction does not mean that speech and music are absolutely different one from the other; they obviously share 1) being from an immaterial sound substance, 2) inscribing in time, and 3) having a symbolic function. It is precisely at the crossed relations of their similarities and differences we could approach the meaning process in vocal music. This paper proposes to define a reasoned procedure in analysing the peculiar “figures of rhetoric” of vocal repertory: how two systems can produce together new tropes and figures, at a higher level, neither simply linguistic nor from the sole musical construction.

Two *Lieder* of Schumann's *Dichterliebe* will support the demonstration.

**MAURO MASTROPASQUA (chair), PAOLO CECCHI, MAURIZIO GIANI**

(Università di Bologna, Italy), **ANDREA LANZA** (Conservatorio di Musica “G. Verdi” di Torino, Italy)

ROUND TABLE: *Historicity and trascendence of musical logic*

The topic of this round table resides on the simple premise that if a conflict – veiled, but actually not hidden – between musical analysis and historiography is to be seen, then it can be referred to the different scientific statuses held by the two disciplines. Historians, who use to consider those of music as linguistic objects, tend to estimate the power of analysis depending on its ability to give relief to these objects as peculiar, individual phenomena. They prefer to avoid those generalizations (about perception, imagination and all kind of thinking in music) that analysts judge necessary involvements of their procedures. This difference could be properly ascribed to the one, made by Windelband, between *idiographic* vs. *nomothetic* models of knowledge. And the problem could be faced, therefore, asking which gnoseologic categories, among those usually taken for granted by analysts, should prove satisfactory from a historical perspective – better said, in order to understand musical structures in their dimension of specific cultural objects as well as exemplar of general cognitive preconditions. Generalizations of some sort about our schemas of inference are inevitable if analysis has to be true to its systematic nature, even if its aim is to emphasize the historical uniqueness of a piece of music.

Anyway, historians – anybody whose questions on music as a language are historically oriented – are incline to consider music nomothetically – i. e. in view of “general laws” –, when they take into account the concept of musical logic. This concept, directly following from that of music as language, concerns any kind of inference – above all, made in a purely intuitive way – of some consistent, apparently causal relation between musical elements. In this round table, we shall move only in the sphere of music as language and not in that of music as mathematics (isorhythmic, canonic and other algorithmic devices of the like obviously deserve the definition of musical logic). The intuitive logical meaning shared by such categories as function, implication, stability/instability, contrast, complementation or other possible generalizations of the kind, seems to show that if musical objects are historical, their logical attributes are transcendental. A focal point is to ascertain to what extent and amount of epistemological potential could raise the hypothesis that such categories essentially substantiate the multiple historical manifestations of musical thinking. Throughout its history, the concept of musical logic reveals an unsuspectable variety of meanings, which show it far from being limited to the “immanence” (sometimes inaccurately paired with an “a-semantic” quality) of “absolute” music. Precisely this continuous tension between necessary and contingent aspects of musical languages could be resolved, if the categories of analysis were considered as something lying beyond the historicity of musical objects, but to be grounded on the very same, in the vein of a “metaphysics of the experience” assuring validity to its methods.

Wolfgang Rihm's mature output has always betrayed a tangible and formative connection with other forms of artistic expression, to the extent that he effectively speaks of himself as a sculptor of sound. The successive particular influence in the 70s and early 80s of Kurt Kocherscheidt and Arnulf Rainer in the visual arts and Antonin Artaud in dramaturgy have been variously explored, at least in relation to the works from the mid 80s onwards. One work, *Tutuguri*, has been called a "border crossing point" in his creative development but it perhaps should thought of rather as the place where Rihm engaged in a more overt struggle to make his creative compositional processes more like those of visual artists.

Rihm's subsequent poetics, and the commentary of others, has tended perhaps to obscure the formative nature of his compositional thinking between late 1980 and 1982 during the composition of *Tutuguri* and the 4<sup>th</sup> String Quartet, and therefore to overlook his developing responses to other art forms which influenced his writing at that time. In focusing, for example, on Rihm's "worked out" musical processes of the late 80s and 90s which are directly comparable and analogous to Rainer's technique of "Overpainting", earlier "premonitions" in *Tutuguri* and the 4<sup>th</sup> Quartet in particular may have been overlooked, in favour of connections with Artaud even though these are not always necessarily obvious in the music.

Underpinning this struggle was the tension between the imaginary and the symbolic where the spontaneous imagination found itself at odds with the need to write the music out symbolically, a state which Rihm refers to as the "active agony" caused by the "comprehensive conflict of material and imagination". This struggle can be illustrated through consideration of some of the tensions inherent in the 4<sup>th</sup> Quartet which Rihm, writing on the occasion of its first performance in 1983, described as a «late-comer and at the same time a precursor».

In *Tutuguri* these tensions are evident throughout through the collision between the influential art forms of Rainer/Artaud and Rihm's idea of 'Musicblocks', as expressed in his essay *Ins eigene Fleisch*. The resulting musical gestures can be directly and metaphorically related to "the blow of the chisel, the brushes" and these connections have not been extensively explored for the various works which constitute the *Tutuguri* "cycle".

This paper explores some of the complex interconnections of artistic ideas that are to be found in Rihm's two major works of 1981-82, focusing in particular on *Tutuguri* parts I, VI, III and the 4<sup>th</sup> String Quartet, relating some of the essential generative conceptual ideas which inform them to examples of musical gestures and "setting" in the aforementioned works. By suggesting ways in which the actual musical materials in these compositions can be construed, our understanding of the development of these ideas in Rihm's later music can be deepened.

François-Joseph Fétis described Alexandre Étienne Choron's textbooks on composition and harmony as «sorte de combinaison éclectique dans laquelle des doctrines fort différentes étaient conciliées avec plus d'adresse que de raison», i. e. just a compilation that has been assembled skilfully. However, they represent to the modern reader an extraordinary contribution to the music theory discussion at the beginning of the nineteenth century; Choron's works are a unique composition of musicological literature of the past centuries. Out of it, he creates a multidimensional music theory, which combines impressively different approaches, and shows further how each is used and what it refers to.

Particularly, this can be studied on Choron's multilayered term of *la dissonance*. The sources, which he uses, emphasize the diverse range of meanings of *dissonare*. Based on Charles-Simon Catel's definition, he expands the concept by adding different aspects referring to German authors of the eighteenth century. In addition, he incorporates Italian ideas, on the one hand from textbooks on harmony of the late eighteenth century and on the other hand from widespread partimento courses. Choron doesn't explain the different practical and systematical implications of *la dissonance* like the majority of the contemporary authors do by means of one specific method or within a specific tradition. Instead, he focuses on the term from various perspectives without giving a definite conclusion. Thus, Choron's concept of dissonance remains pending and searches a dialectical balance of various methodical approaches.

In the presentation, the practical application of Choron's multidimensional concept of chords will be depicted. Therefore, one of Choron's examples will be used to demonstrate various interpretations. Finally, the question will be discussed, whether Choron's music theory opens new perspectives on apparently well known concepts.

*Analyzing Carissimi*

Giacomo Carissimi was one of the most important composers of the Roman Baroque. Not only as a composer, but also as a teacher, he influenced many students from different European countries at the seminary Collegio Germanico e Hungarico, among them Marc-Antoine Charpentier, Christoph Bernhard, Philipp Jakob Baudrexel and Johann Caspar Kerll. His great reputation can be seen not only in the quotation of the final Chorus of the oratorio *Jephta* in Athanasius Kircher's *Musurgia universalis*, but also after his death in the reception of his works. This reception continued for a long time, as one can see paradigmatically in compositions of G. F. Handel, who, for instance, parodies the final Chorus of *Jephta* in the oratorio *Samson*.

Although his works were not published as prints (as was much vocal music of the time) they were judged as effective examples. They were analysed by students or other composers as models for their own musical output. Therefore "analysing Carissimi" is first a phenomenon of the Baroque era. Carissimi can be seen as a protagonist of a specific Roman *seconda pratica*. This concerns different aspects of his music such as design of the solo voice, chorus techniques, form and dramaturgy of the oratorio, style of the monody, modality, harmony, counterpoint, etc.

My talk will concentrate on two of these aspects: harmony and counterpoint. Analysis had to show the models which Carissimi established as standards. Harmony and counterpoint in the seventeenth century should not be understood as separate principles; rather harmony is a result of counterpoint, tangible as grips in thoroughbass. Using techniques of the *seconda pratica*, Carissimi established baroque standards which tend towards a "Baroque Classicism".

The talk will show the following phenomena:

- Opening formulas in which modern uses of dissonance are fixed as standards.
- Progressions which include the use of dissonance. Beyond the famous ostinato basses, Carissimi uses certain patterns with specific upper voices, which are used until the eighteenth century.
- Cadences with expressive treatment of dissonances.
- Specific use of the so-called Neapolitan sixth chord.

Analysing Carissimi today could allow new perspectives, taking the compositions of the Roman composer not only as closed works but – from the view of Baroque composers – as model compositions.

*Making and listening: remarks about computer music analysis.*

*Horacio Vaggione's Gymel*

Today, "electroacoustic music" and computer music can be considered to be one and the same: digital processes are present in each step of composition and sound is naturally becoming a digital matter. In computer music, it becomes more and more difficult, for the listener, to consider sound as a well-defined object in time and space. He is very often confronted more with complex sound structures than with entities clearly defined and distributed in time and space.

Faced with this "problem", how do we analyse a computer music work? First, we can focus our attention only on the technological aspect of the work. This reaction poses two fundamental problems: on the one hand, it is necessary to have access to this specific material and the composer has to agree to this particular approach (he has to reveal "his secrets"). On the other hand, this type of analysis minimises the central role of listening for the computer music composer and for the listener: by giving more emphasis to a path from the sound material to the listening, this analysis disregards the extraordinary interaction between making and listening for the composer, who elaborates the work in a series of comings and goings between his hand and his ear, his manual controls and the sound effects. The second method has a tendency to favour the strictly subjective "point of view" of the analyst: he/she only describes or transcribes objects and phenomena, which appear to him/her. However, this type of analysis eludes the work of composing. Generally speaking, these two types of analysis do not take enough into account the omnipresent interaction between listening, the sound matter and the implemented means by the composer (his/her tools), between making and listening (at the time of composing and at the time of the final hearing).

The electroacoustic works of the composer Horacio Vaggione are symbolic of this necessary questioning of the musical analysis. Appearing among the pioneers of the computer music, Horacio Vaggione likes keeping his secrets and very often reveals his compositional techniques in a sketchy and enigmatic way. It is very difficult to analyse his works, which are always particularly dense and complex. For instance, this composer – who implements granular synthesis techniques or processes of granulation – creates complex "networks of objects" and he perpetually involves interaction between multiple temporal scales. When we listen to his works, we consequently hear a number of interlaced dynamic movements, which could be described as well as isolated sounds, as dynamic processes or as sound structures.

By referring to the analysis of his work – *Gymel* (2003) –, I shall clarify an analytical way, which tries to find the interaction between the sound material and listening. Searching for this fragile interaction allows us to take into account on the one hand this new sound material offered by computer music and on the other hand the specific relation with listening that the latter introduces.

Though an enormous amount of analytical literature exists on the works of Johann Sebastian Bach, few attempts have been made to develop a systematic model for unraveling the expressive content of his choral preludes for organ. As such, the field of expressive meaning in Bach's works has remained largely unexplored. In this paper, I propose an expressive reading of Bach's chorale prelude *O Mensch, bewein dein Sünde groß* BWV 622 that draws on current models of music and emotion as well as on current research in the field of music cognition as a whole. By building on these models and including them in my analysis, I glean insight into the expressive elements of this chorale prelude and articulate my own model to explain and interpret the features that make this piece an expressive work.

In my discussion, I build on Robert Hatten's theories of agency and expressive gestures and on Jenefer Robinson's persona theory; furthermore, I enrich the discussion with ideas from the theories of emotions outlined by David Huron, Elizabeth Hellmuth Margulis and Patrik N. Juslin. I specifically focus on the interdependency of the musical surface of the chorale prelude and the text of the chorale. I argue that understanding this interdependency is essential for establishing an expressive reading of BWV 622; moreover, I propose that understanding the socio-religious context for which this piece was composed is crucial for interpreting its musical gestures as expressive of emotion. Finally, I propose a theoretical model which accounts for the ways in which emotion may be induced in a stylistically competent listener who is aware of the socio-religious context pertaining to this work.

I argue that the chorale prelude *O Mensch, bewein dein Sünde groß* BWV 622, as a functional piece intended for use within the church, was designed to arouse specific emotions in the Lutheran listener of the time. First, I work on the assumption that the expressive narrative of this chorale prelude becomes meaningful when interpreted in the context of the Lutheran liturgy. And second, I work on the assumption that the chorale prelude's functionality within the liturgy ties the chorale-text and chorale-prelude together to such an extent that the expressive content of the latter can be construed in terms of the former. Such assumptions allow me to correlate the expressive gestures in the musical surface directly to the context set up by the chorale text and, in turn, allow me to interpret this correlation from the standpoint of current scientific research in the field of music and emotion.

When Pere Rabassa wrote his *Guia para los principiantes* in 1730, the Spanish musical scene was characterized by very divergent styles and by lively controversies. The sacred repertory of the sixteenth century was still intensively cultivated, and considered as a model for composition. At the same time, the secular music was much more open to the modernizing influence of Italian opera and instrumental music. Progressively, the "Italianization" reached the sacred music, and this led to vehement controversies between innovative musicians and the guardians of the old Spanish school. This dichotomy has characterized the historiography of Spanish music since its origins. For example, Soriano Fuertes wrote in 1857: «We have become loyal imitators of the foreign style since the late seventeenth century [...] We have despised our own patrimony and have preferred the foreign one [...] This is the history of our musical decadence.»

Unfortunately, such nationalistic prejudices have characterized Spanish musicology until the late twentieth century. But, in the last decades, a critical treatment of the huge repertory of the eighteenth century – which was neglected for a long time – has begun, and it shows us a rather new, more differentiated picture: there is a very broad stylistic spectrum between the "conservative" and the "italianized" poles. The Catalan Chapel Master Francisco Valls offers in his *Mapa armonico práctico* (1742) an excellent compendium of the compositional techniques of his time, reaching from the severe Spanish sacred style to the dramatic Italian style.

His pupil Pere Rabassa concentrates on church style in his *Guia para principiantes*. This detailed course begins with the improvisation of two-voice counterpoints, and leads step by step up to the most difficult contrapuntal artifices. Rabassa discusses the full-voiced counterpoint (8 or 12 voices) with great detail, and he shows a great joy in experimenting with dissonances, combining up to seven different pitches simultaneously by means of using syncopations. He writes also about different sorts of canon on *cantus firmus* up to 8 voices. In the treatise there are no traces of thorough bass or of theory of harmony, the approach is absolutely contrapuntal. Rabassa's and Valls' treatises represent an essential tool to analyse Spanish music of their time.

In my presentation I will focus on a central facet of Rabassa's treatise: the voice hierarchy. Rabassa examines in each progression of a full-voice setting which voices are essential, and which are secondary, and therefore dispensable. Almost half of his examples contain lots of numbers indicating the hierarchy of the voices. We find a similar approach in many other Spanish treatises, but only Rabassa treats this point in such an extensive way. To complete my presentation, I will show the relevance of the voice hierarchy for the compositional technique analysing works of Cabanilles and Nebra.

One of the questions that troubled eighteenth-century music theory was the status of the fourth. While this interval was considered dissonant by some authors, it was subsumed under consonances by others. Among the former authors, some distinguished between *quarta dissonans* (the fourth colliding with the fifth in the five-four chord) and *quarta consonans* (the fourth harmonising with the sixth in the six-four chord).

A solution to the problem of the fourth was proposed by Johann Philipp Kirnberger in the first volume of *Die Kunst des reinen Satzes in der Musik* (1771) and elaborated in *Die wahren Grundsätze zum Gebrauche der Harmonie* (1773). Kirnberger drew a distinction between the consonant six-four chord as the second inversion (*Verwechslung*) of a triad and the dissonant six-four chord as a nonessential dissonance (*zufällige Dissonanz*) where the sixth is a suspension of the fifth, and the fourth is a suspension of the third. The difference between these chords is reflected in their fundamental basses: the fundamental bass of the former coincides with the real bass; the fundamental bass of the latter lies a fifth below. In Kirnberger's examples these fundamental basses fall, respectively, on the fifth and the first scale degrees. It follows that the consonant six-four chord is the second-inversion tonic ( $I_4^6$ ) while the dissonant (cadential) six-four chord is based on the dominant ( $V_4^6$ ).

The twofold harmonic function of the six-four as the tonic or the dominant and its twofold interpretation as a consonant or dissonant chord underlies some eccentric manipulations of cadences in Haydn's string quartets. These manipulations take place in codas and codettas of sonata-form movements. I suggest that they result from Haydn's critical reflection upon Kirnberger's theoretical works and draw witty conclusions from music-theoretical debates of the time.

Any reflection on the principles of musical hearing has to face the problem that the complexity of the examined works usually exceeds by far that of the desired theoretical generalizations. Therefore, the formulation of appropriate hypotheses requires a methodical reduction, which distinguishes "accidental" from "essential" characteristics and cuts them temporarily out of the regarded context. In order to justify such necessary simplifications theorists often referred to extra-musical (e.g. mathematical, physical or physiological) circumstances, but in fact musical hearing remained (or should remain) the crucial instance of their decisions. However, this implies a methodological problem: since perception depends not only on presented stimuli, but also on the aesthetical experience and the theoretical background of the listener, there is no warranty for the adequateness of the gained results – a dilemma which affects both traditional analytical methods and experimental music psychology. The attempt to reconstruct the hearing habits of historical persons from contemporary sources may be helpful to overcome this difficulty, but it will normally not answer all open questions.

In contrast to auditory consciousness, notational representations of music seem to contain rather little information about the "meaning" of the individual events. Nevertheless, musical scores include a certain quantity of "hidden" indications about the perceptual apparatus which was involved in their creation. The present study tries to decode some of this not directly accessible information – particularly concerning aspects of harmonic tonality – by means of statistical methods. For this purpose a large number of compositions from the first half of the eighteenth century (above all the chorales by J. S. Bach and G. Ph. Telemann) were analysed by computer software. The use of digitized scores instead of MIDI data allowed a more accurate analysis. Movements were divided into short sections according to bordering voice onsets. These sections were subsequently weighted by duration and classified regarding their interval structure as well as their relation to the *finalis*, the bass or the upper voice; the metrical and syntactical positions and the environment of the elements were considered if necessary. Owing to the higher variability – and therefore reduced rate of recurrence – of the "accidental" components the above mentioned reduction of complexity was achieved (almost) without the need for an additional interpretation. Dependent on the selected point of reference the frequency distributions of the examined features show strong correlations with different versions of the so-called *regola dell'ottava*, but also with paradigms of the nineteenth century like the concepts of scale step or harmonic functions. The results suggest that differences between the theories are not only a consequence of stylistic factors, but also an effect of the various viewpoints taken by the observer.

*The theatricality of Frescobaldi's keyboard language*

The main purpose of this study is to demonstrate how Frescobaldi's musical art, specifically the part dedicated to *da tasto* [keyboard] instruments, partly developed from contemporary aesthetic techniques of the so-called *Commedia dell'Arte*, particularly the formulas of improvisational actors at the end of the sixteenth century. It's in the theatrical treatises, more than in musical ones, that one can find the "mental habit", which underlies music making in Rome and Italy in the early seventeenth century. The music of Frescobaldi is therefore a kind of "stage writing" through the use of sounds, with its sources, rhetoric, criteria of *imitatio* and *inventio*. It's in this period that the *canovaccio*, a sort of "guide" which listed the key elements needed for the action, was conceived. Within this guide, the improvisational routine stored in every artist's mnemonic background came to life. Everything had to seem natural and spontaneous; each element of an improvisation had to be placed in the right place at the right time. Therefore the musical work, in the case of Frescobaldi, should be understood as a communication project (*Musica pathetica* in the words of Kircher). For the painters "to pierce" the ceiling (of churches and palaces) meant to erase the separation between earth and the sky, creating a unit between the finite and infinite to involve the users of the product in an amazing aesthetic illusion; so for Frescobaldi his new *maniera di suonare con affetti cantabili* clarifies the separation of roles between the author and performer, as the creative act is fully realized only when it is extemporaneous (an improvised illusion) and the execution follows the previously laid down rules. No wonder then, that «chi non suona secondo il suo stile, non è stimato» (Bonini). Developing this concept, for the first time in history the performer is given equal responsibility to the authors during his re/creation of the work. The repertoire of the baroque artist (both musicians and actors), and its relevance therefore depends, on one hand, on the ability to memorize a large wealth of pre-written scores and scripts, on the other on the ability to vary all these elements among his vast mnemonic repertoire. Furthermore, in the period of counter-reformation in Rome, illusion and fascination could not be separated from education and also from the finalizing of the formation of an inhabitant of the two cities, one for men and another for God. In every baroque art project, both secular and religious, Rhetoric is relevant in this; it is the subject of an extraordinary, somewhat excessive, proliferation: the sum of all rhetorical figures set out in the various historical treatises (in both musical and literary), it can count at least 465. The baroque musician, who wants to programmatically impress through the artistic product, will get the best surprise only through the maximum involvement in terms of re/creation. The charm, the beauty and the big news on the expressive level, the music of Frescobaldi consists in this follow one another (still practical opportunity today) creative acts.

*Res or verba? About the historical source of the controversies of the word-music-relation and its analytic-hermeneutical consequences*

With the demand for *imitazione delle parole* (Zarlino 1588), which comes up since the late sixteenth century, the focus was led from the pure contrapuntal arts to the words as the main point of the composition. Thereby the compositional problem arose, to distinguish or convey between the expression of the single word and that of the sense of the whole text. Probably for the first time this problem was described by Sethus Calvisius (1592) with the terms of *res* (= things or the basic affect) and of *verba* (= single words). This can be followed till the aesthetic discussions about the stanzas or through-composed songs at the beginning of the nineteenth century.

Generally it was the *res*, which was favoured in the history of music theory (V. Galilei, Kircher, Printz, Mattheson). This can be deduced especially from the criticism of the *verba*-setting: from the indirect polemic of the German music theory in the seventeenth century against the Italian madrigal, from the accusation to be bold, simple, onomatopoetic and from the contradiction between the verbal sense (*sensus*) and the actual message (*scopus*) of a text as it appears with negations, metaphors or allegories.

Towards this general tendency of the "*res-contra-verba-discussion*" to emphasize the *res*, the *verba* kept their own importance. *Verba* are supporters of the *res* and their first actuator with the *inventio* of vocal music (the "musical study of words"). The concentration on the musical setting of single words had its compositional formation especially in the compositions of madrigals, in the recitative (in opposite to the *res* of the aria), in the aesthetics of changing the passions since the middle of the eighteenth century, in the accentuation of the single effects of the romantic music (Ernst Kurth: "absolute effects of chord-progressions", 1920) and in the demand to a "special-matching word-expression" [Hans Georg Nägeli 1817] of the through-composed song.

To get a semantic analysis of the word-music-relation you can make recourse to the *fontes principales* of Johann David Heinichen (1728), if the meaning of an expression is not congruent between music and words: to the *antecedentia* or *consequentia textus* when the verbal and musical expression are delayed (later, the romantic area speaks about memory and intuition); to the *concomitantia textus*, when *sensus* and *scopus* of a word or a text would be not congruent or contradictory. So *res* and *verba* become a good instrument for the hermeneutic analysis, which helps to solve the problems of the difficult or not obvious comprehension of word-music-relations.

Fragmenta ex mottett. *The manuscripts of Herdringen – an important source for musical analysis of music before 1600*

There is no better way of analysing music from the time before 1600 than with “analyses” that date from this very period. The Manuscripts 9820/9821 of Herdringen are therefore an extraordinary example: a collection of scores which were written presumably for studying reasons – which is already from the notational point of view very remarkable for the time around 1530 and one of the earliest examples. But there are not complete compositions, which were transcribed from part books, but smaller, evidently carefully chosen sections from mostly masses or motets from composers flourishing around 1500, beyond them famous personalities as Josquin des Prez, Antoine Brumel or Pierre de la Rue. Spectacular, though, are the manuscripts not only by the fact that there are scores and that they contain even some unique pieces by Josquin des Prez, but especially for their meaning for music theory. Small crosses and remarks in the score give us information about the aspects which seemed to be interesting to the scribe concerning evidently the compositional point of view.

Here some examples and the probable intention of the compilation of the manuscripts:

- I: Sebald Heyden: the examples of *Fortuna desperata* by Senfl, which are quoted by Heyden do not correspond to the ones which the scribe of Herdringen chose and do represent therefore perhaps a probable complement.
- II: The canon mass *O salutaris hostia* by Pierre de la Rue. In the literature it says that the scribe of Herdringen made a mistake when interchanging the entrance of the voices. I do presume, though, as the Antico print by 1516 seems likely to be the model, that the scribe made this “mistake” on purpose to check the consequences of this “mistake”. And he carefully comments his observations with the occurring interval indications of “7” and “4”.
- III: 6-6-6 progressions: it seems likely that the scribe of Herdringen was also interested in compositional models which are very important for the understanding of compositional processes. Therefore an excerpt of Josquins mass *Hercules dux Ferriae* is a good example where we can also find *false relationi*.

The presumed motivation behind this vast collection of examples seems to be a carefully chosen complement of what can be found in theoretical writing of the time.

A first examination of the current treatises in the German speaking area of that time matches closely in its content without reverting, though, to examples, which are exactly the same. Therefore it seems quite likely that the scribe of Herdringen was himself a theorist who was about to write a treatise himself or even did so.

It is to say, however, that the examples exceed the sheer aspect of content by far and open the field for another aspect: who is quoting whom and for which reason? Herdringen can reveal relationships between composers and theoreticians, which are in their consequences for an enlarged contextualisation of the single treatises not yet considered.

*Liszt's formal thinking in his 1830-1848 piano fantasies on themes from opera: a laboratory of the formal innovations of his Weimar period*

The intention of this work is to see how the interplay in and upon social constraints that influence, within Liszt's fantasias, a double strategy of borrowing from opera and simultaneously welcoming the concert audience of the same period, creates a particular type of musical work whose contents are strongly popular and, at the same time, indissociable from a specific form: the fantasia form.

This very original form that was elaborated upon by Liszt between 1835 and 1848 in his fantasias based on operatic themes, links an experience of the long form to a work on the significance and semantisation of sound. Undeniably, despite their diversity, the fantasias composed between 1835-36 and 1848 bear clear relations to the formal and agogical structure as well as that of the logic behind the management of the relationships of tonalities and types of similar piano compositional styles. The comparison between the fantasias composed before 1848 and the works of the Weimar period (*Symphonic Poems*, *Sonata in B minor*, *An interpretation of Dante*, *Grand Concert Solo*, *Faust-Symphony*, *Totentanz* etc.) demonstrate the debt that the composer has after 1848 with the fantasias on operas from his virtuoso period. A true continuity extricates itself, as much concerning the thought of a typically romantic extended form, breaking with the sonata form, as the semantisation of the musical instrument itself to the symphonic poem.

The conclusions that are deduced also show the continuity of the social project that unites the virtuoso from before 1840, the ideologist of the 1835 manifesto, *On the situation of artists and their condition in society*, and the prophetic composer of Weimar; it is there where one often sees such a breaking. Finally, on a more strictly analytical level, one notes that the knowledge of Liszt's fantasias on opera themes, renewing the view that one can have on the formal thought process of Liszt, casts doubt over a certain number of analyses, often subservient to the sonata model, that had been proposed up until now.

*Between orality and notation. Towards an analysis of Classical Japanese music for shakuhachi*

The need for an opening of music theory to music outside of Western art music has long been stressed. However it seems that musicology seems to be somewhat shy towards analysing “other” music. The present paper proposes to do just this.

### 1. Keys to understanding

**Sound as a Gesture and a Function.** The boring D-F-G-A-C was maintained after the upcoming of hemitonic pentatonism D-E $\flat$ -G-A $\flat$ -C. Hence the player developed pitch bending techniques, called *meri/kari* (flattened/straight), which eventually became the centre piece of its aesthetics. To flatten a sound, the angle of the embouchure is altered, and wholes are shut partially. *Shakuhachi* music is based on three notes in conjunctive fourths (D-G-C) as pillar notes. The interspaces may be formed with other *kari* notes (F, A), and flexible, floating notes (*meri*). The disposition of *meri* (closed/pure) or *kari* (open/brilliant) sound in the compositional design reveals musical and formal strategies. Pitch design is a result of specific sound events. Since sound nuance is ruled by the gesture of the player, the result may be irrelevant in the face of the physical enacting of “playing”. A composition is a musical choreography of the player’s action.

**One sound.** Melodic cells tend towards utmost concentration. Ideally a phrase would be shaped out of a single pitch, according to a coherent succession of gestures, of enacting sound as stasis or movement. The material is as simple as not to divert from these primary intentions.

**Spacing.** The notation being restricted to tablatures, understanding is based on listening to a teacher. Since no tonguing is used, finger articulations result in essential, but unwritten melodic appoggiaturas. One *legato* phrase often covers the reach of one breath. Breathing then is the essential factor of formal understanding and rhythm. The spacing of sounds is the core of mastering an interpretation. The concept of “ma” (interstice) means the subordination of interpretation under the concretion of breathing. The shaping connections is ruled by the ideal of balance between sound event and silence being interconnected.

### 2. Form

The analysis of the classical solo piece *San Ya* shows how a simple cell is used as a factor of stability and trigger of variation. The shape of the introduction (a-b-c-b-a) as well as of the central section (A-B-B-A) and of the global form (1-2-2-1) reveal a tendency towards arch forms. Several aspects point to scholarly intervention through writing and re-arranging music: The complex overlapping of the 5 main phrases, phrase a’ being immediately developed in A, functioning thus as a formal hinge. Repetitions start from the second, then third element. All sounds, fingerings, and phrase shapes not belonging to the “thematic” material are located in sections clearly designed as bridges, concluding or returning sections, therefore functioning as formal cues.

*Fuggir la cadenza, or the art of avoiding cadential closure. Contemporaneous vs. modern perspectives on the analysis of “deceptive cadences” in the classical repertoire*

in PANEL: *Analysis, historiography, and the construction of meaning*

Deceptive cadences are a well-known harmonic phenomenon of the so-called “common-practice period.” In many harmony treatises and textbooks of the twentieth century, deceptive cadences are considered as arising primarily out of a genuinely harmonic procedure: in an otherwise regular cadential progression, the final tonic chord is unexpectedly replaced by a substitute harmonic function, thus creating the deceptive effect that gave this progression its name. In our presentation, we will first offer a “rational reconstruction” of cadence typologies as encountered in numerous twentieth-century theory textbooks, and situate the deceptive cadence within the framework of such typologies. We shall then confront these modern approaches to the cadence with historical accounts from both the Italian and German thoroughbass tradition. A survey of a broad selection of eighteenth-century treatises will reveal a distinctly contrapuntal perspective (as opposed to a modern harmonic one) on the classical cadence, a perspective that focuses explicitly on the “behaviour” of each single voice within a genuinely contrapuntal setting. It will become evident that most eighteenth-century theorists understood the cadence as a composite of clausulae, in which each voice performs its own clausula. In a typical deceptive cadence, the deceiving effect has been said to result from a “deviant” behaviour of one particular voice, either the bass or one of the upper voices (most often the soprano), while the other voices behave as expected. In the second (analytical) part of our presentation, we shall examine some examples from sonata-form movements by Haydn and Mozart, in order to illustrate the various techniques of cadence avoidance that have been employed in compositional practice, as well as the multiplicity of formal roles fulfilled by deceptive cadences. It will turn out that there has been a much greater variety of deceptive cadences than has generally been acknowledged in the literature. In addition, we will devise a (currently still lacking) typology of structural functions of deceptive cadences, taking the following four (partly overlapping) functions as a point of departure: 1) structural expansion; 2) tonal prolongation; 3) parenthesis; and 4) modulation. Throughout this analytical part, we will apply an apparatus that takes into account the insights we gained from our reconstruction of contemporaneous modes of understanding the cadence.

We shall conclude our presentation with a brief reflection about both the possibilities and problems of a “historically informed” music-analytical endeavour. On the one hand, it will become clear that those contemporaneous approaches that view chords not as separate entities but rather as an epiphenomenon of voice-leading processes offer a considerable enrichment of modern theories by providing a markedly different, contrapuntal explanation of deceptive cadences. On the other hand, we will show that historical theories are far from providing answers to all the questions posed by modern analysts, especially when it comes to the large-scale tonal functions of deceptive cadences.

*Instructing how to interpret Beethoven's last Piano Sonatas around the turn of the twentieth century*

This presentation aims to reveal how the German speaking musicians since the 1850s until the 1910s tried to make contemporary pianists interpret Beethoven's last Piano Sonatas, especially through the editions and descriptions of them.

Since the latter half of the nineteenth century, a lot of so-called "instructive editions" of piano pieces by the German classical composers, such as H. von Bülow's editions, were published. Parallel to them, Beethoven scholars such as A. B. Marx (1859), W. von Lenz (1860) etc. featured his Piano Sonatas and suggested how to interpret the profound masterpieces. Also into the next century, not only Beethoven experts like W. Nagel (1905) and P. Bekker (1911), but also H. Kretzschmar (1911) and H. Schenker (since 1913) analysed these pieces, striving for both better interpretation and proper listening.

In each instruction, a certain tendency can be observed and the change of tendency formed a performance history through this period. In order to trace this change, it would be suggestive to take up Schenker's criticism against interpretations of former editors and writers. According to Schenker, Bülow's arrangements were based on his "subjective" judgments. Similarly, aesthetic descriptions of other writers were also useless to appropriate understanding. In Schenker's opinion, objectivity faithful to the *Urtext* was of primary importance; only by analysing the authentic text, one could obtain the "rightness" of one's interpretive practice like fingering. In such Schenker's discourse, one can see the drastic change of the relationship between the masterworks and their executions.

*Improvising, composing, "making" sound: Divertimenti for violin by Giacinto Scelsi*

Scholars who want to analyse Scelsi's music are faced with some theoretical and methodological problems which are completely different from those normally faced in the study of the Western music tradition. His scores are written in conventional notation, are published and are usually performed in concert; but what is truly original, and has no similarities with the practice of other European composers, is the creative process that leads to these scores. The realization of a piece consists of three phases: 1) the author improvises on piano, ondioline and other instruments, and records his improvisation on magnetic tape; 2) the recordings are transcribed by an assistant, who makes a written score; 3) the author works with performers, who sometimes are allowed to listen to the tapes of his improvisations; in some cases, this work leads to a revision of the score for publication.

The attention of scholars has thus far concentrated on the last creative period of Scelsi, inaugurated in 1959 by *Quattro pezzi per orchestra (ciascuno su una nota sola)* where he tries to explore the "depth" of a single sound through an evaluation of its timbral and harmonic components. Less attention has been paid to his previous works, also characterized by a strong experimental trend, but not so radical and extreme. This report focuses on the analysis of *Divertimenti* for violin, a series of five pieces composed between the late 1930s and early 1950s, one for violin and piano and the others for solo violin. Even if the official catalogue includes only four *Divertimenti* for solo violin (n. 2-5), a complete score of the first piece (*Divertimento* n. 1) is preserved in the archives of Fondazione Isabella Scelsi, as well as some recorded-tape improvisations by the author.

The first problem concerns the definition of analytical "objects" to be investigated: what is the relationship between the composer's improvisations recorded on tape and the text written on paper? How is it possible to reconcile two different conceptual and behavioural universes, as well as improvisation and composition, with the same sonic result? The encoding process of the written text involves in fact the transformation of an *event*, improvisation – based on the sensory-motor activity of the performer who gives rise to a physical modulation of sonorous energy – into an "object" that is set once and for all in its formal components.

Analysis of the score focuses on segmentation of formal units, articulation of the melody, identification of salient features (such as repetition and key-notes) and mobility of rhythmic figures. The results of analysis of the score are then compared with the data that emerge from the analysis of the tapes. The difference between these different modes of realization of a creative project shows a concept of making music that, while arriving at the realization of a score, distances itself decisively from the conceptual model of work inherited from the tradition of European music.

In the catalogue of the Italian composer Giacinto Scelsi (1905-1988), a significant portion is dedicated to the voice. Particularly revealing are the works for female voice, created mainly in the first half of the 1960s: *Hō Cinque melodie* for solo soprano (1960), *Lilitu* for solo female voice (1962), *Taiagari Cinque invocazioni* for solo soprano (1962), *Khoom Sette pezzi* for soprano, horn, percussion and string quartet (1962).

It was during this period that Scelsi first began to be interested in the use of voice and to explore its peculiarities and potentialities; at the same time he started composing works such as *Canti del Capricorno* (1962-72), a cycle of twenty "canti" for female voice and instruments (recorder, saxophone, double bass, percussion). The creation of this cycle accompanied the composer for almost a decade in a vocal peregrination with the Japanese singer Michiko Hirayama who had been living in Rome since the early 1950s.

The collaboration between Scelsi and Hirayama became increasingly close, with growing mutual respect and admiration: with her unusual education – a rich repertory of Japanese traditional songs combined with an occidental training – Michiko became a source of inspiration for realizing the infinite shades of voice, dynamics, tone audacity, rhythmic virtuosity, pitch range, and microtonality.

Exploration of the vocal technique is consolidated by the peculiar compositional process adopted by Scelsi long before these years: lengthy improvisations on the ondiola recorded on tape, entrusted to collaborators/copyists/transcribers. Scelsi himself carried out a meticulous work of revision on the first version quite often realized – through successive stratifications – together with the performers who took part and collaborated in defining the final version of the written page.

The unusual compositional process of Scelsi and the close collaboration with the Japanese singer – in particular for *Canti del Capricorno* – give rise to the following assumptions:

- the close relationship between the oral and the written;
- the elimination of the borderline between composition and improvisation;
- improvisation as a compositional project;
- the relationship between music, mind and body;
- the relationship between technique and interpretative praxis.

It is our intention in the present paper to discuss the above assumptions, also on the basis of the sound and paper documents preserved at the archives of Fondazione Isabella Scelsi in Rome (and still to a large extent unknown) and of the more recent testimony of Michiko Hirayama.

Singing is one of the favourite activities of children in different contexts. Lots of research studied the first manifestations of singing activity: Krumhansl [1987, 1990], Billingslay and Rotenberg [1982], Biørkvold [1990], highlighted the distinctive features of the infant singing. Many others focused on its initial appearance in children: Tafuri [2007], Dowling [1984], Moog [1976], Welch [1986, 1998, 2000] and others made important discoveries about the development of melodic perception and children's imitative singing [Moog 1976; Shetler 1989; Tafuri 2007].

In previous research the authors (Baroni, Perri, Tafuri) analysed a repertoire of infant songs from different educational Italian environments. The analysis focused on some key structural aspects: lyrics, rhythm, intervals, tonal characteristics, harmony, and form. The authors identified a kind of "prototypical structure" that characterized most of the songs from that repertoire. This research intends to be the ideal continuation of the earlier work and it aims to compare other repertoires coming from different backgrounds of Europe (Spain, Sweden) and outside Europe (China).

The first step was to compare the Italian repertoire with the Spanish and the Swedish ones, to see common and typical features of the countries; the second one was to compare the overall European data with Chinese. The prototypical model was adopted to analyse the European repertoire in order to realize if it could be easily used to differentiate (through statistical comparisons) the common from the specific elements. We found that the European repertoires have much in common, a sort of Western melodic grammar that joins to the infant repertoires as well [Meyer 1973; Huron 1991; Oura 1991; Larson 1997; Baroni-Dalmonte-Jacoboni 2003]. As for the Chinese repertoire, the attempt to apply the same grid was negative, so a different one was applied. The stepwise intervals were assimilated in some ways to the two minor thirds, typical of the pentatonic scale and jumping intervals were analysed without taking into account their potential harmonic implications (absent in Chinese melodic tradition).

This report will show that a statistically decreasing presence of progressively wider intervals has emerged: in all the repertoires stepwise movements are about 40%, while note repetitions are about 34%, the third is about 16% and the other stepwise movements are gradually decreasing until the ninth, with the exception of the fourth and the fifth in a specific position. In fact in all the repertoires there was a meaningful presence of the interval V-I, both ascending, that means creating a fourth, or descending, that means creating a fifth. As for the Chinese repertoire the intervals of fourth connect degrees of the scale that do not underlie harmonic leaps (tonic and dominant chords in European tradition).

**WAYNE PETTY** (University of Michigan, Ann Arbor, United States)

"A plan corresponding to the peculiarity of the subject": Czerny's advice on the development section and its application to Haydn

The development section in classical sonata forms has proven resistant to the kind of systematic treatment usually accorded the exposition and recapitulation. Among current scholars of sonata form Caplin acknowledges that the precore-core-retransition model is not always applicable, while Darcy and Hepokoski similarly acknowledge that the four distinct action zones they describe must necessarily remain general. The Schenkerian tradition made an important advance with the voice-leading models presented in Edward Laufer's 1991 article on the development section and the dissertation by Mark Anson-Cartwright. These authors, too, acknowledge that development sections are highly individual and that whatever voice-leading models operate in them must be interpreted according to a movement's guiding compositional ideas.

An early writer who still has much to offer the study of classical development sections is Carl Czerny (1848), who stressed harmonic planning, the invention of "a particular form," and the proper timing of the recapitulation: «The most difficult thing in [the development section] is the observance of that nice boundary which lies between the Sonata and the Fantasia or Capriccio. For this portion of the second part (until the re-entry of the principal subject) the composer must form a plan, which he must at first note down in figured chords, and in respect to the rhythmical and aesthetic connexion invent, in some degree, a particular form, corresponding to the character of the first part and to the peculiarity of the subject. All harmonic complication must be calculated thereon, for the purpose of returning to the principal subject "at the proper time".»

This paper will build on Czerny's insights to show, in the development section of Haydn's E $\flat$  Piano Sonata Hob. XVI:52, first movement, that the bass "plan" and marked chromatic shifts correspond in specific ways "to the peculiarity of the subject." Enlarging elements from the opening subject and its previous transformations, this thematized figured bass plan is realized through specific changes of diminution, themselves traceable to the opening subject. The analysis reveals, among other things, that processes of thematic development and recombination featured in many development sections may affect the entire middleground plan of the section, not just the arrangement of diminutions, making the need for voice-leading analysis especially urgent for the development section, perhaps more so than for the exposition and recapitulation.

Closing remarks drawn from essays on this Haydn sonata by Tovey and Schenker will point toward the need for theories (form-functional, Schenkerian or otherwise) that address more fully the differences in sonata-form procedures that may result from a movement's position in a multimovement work.

**OLIVIER PIGOTT** (Conservatoire à Rayonnement Régional du Val d'Yerres, Brunoy, France)

*Mahler: a prefiguration of the cinematographic narrative*

The narrative character of Mahler's works has often been underlined. What are the links of this narrative and the timing of the events of the cinematographic story? We will use the composer's Sixth Symphony as an example.

This work has a great number of themes or motives, which the auditor perceives as being akin all along. These themes form a complex and changing framework of musical gestures, melodic outlines and rhythms often very close to each other.

All these themes and motives are claiming for their heterogeneous character, but simultaneously are inscribed in a structured form, directed towards its outcome: the Finale. This one can be an accomplishment or, as in this tragic symphony, a catastrophe, along Adorno's terminology (*Mahler, a musical physiognomy*). Therefore, with Mahler, the story and the organization of its events, along a certain order, with a beginning and an end, is not the creation of a fully controlled world, but rather represents the impossibility of a totally completed discourse and integrates, within itself, this incompleteness.

Mahler's narrative has often been compared to the novels of the end of the nineteenth century, a comparison which was reinforced by his fascination for Dostoevsky. This comparison has led to analyses, such as those by Robert Samuels and Anthony Newcombe. The former, in *Mahler's Sixth Symphony – A Study in Musical Semiotics*, compares the Sixth Symphony to *Anna Karenina* and *Madame Bovary*: the story of an individual character, facing a repressive society, finds its musical equivalent. The latter compares the Ninth Symphony to Charles Dickens' *Oliver Twist* and *Great expectations*.

Can we rightfully extend this analogy to the cinematographic story? Art «for which time is almost the fundamental (and sole) structural principle – the cinema» (Vjaceslav V. Ivanov), finds its "temporal consistency", notably through the art of David Ward Griffith, during the last years of Mahler's life (the New York years). For Griffith, «time really becomes a foreground dramatic element» (André Gaudreault), through the convergence of the actions, by the parallel buildup towards a denouement, which is always a "last minute rescue".

If one transposes this concept of time into the formal framework of Mahler's symphonies, their composite sound reality, integrated into a continuous musical flux, will highlight how Mahler's own understanding of time constitutes a prefiguration of the contemporary cinematic narrative. The Mahlerian form integrates a rather heterogeneous and pluralistic "objective" in a coherent story, like the cinematographic "images of the world". Similarly, the Adornian concepts of deviant (*abweisung*), breakthrough (*durchbruch*) and suspension send us back to a "realistic", concrete, and factual temporality.

*Multiple temporalities: speeds, beat cues, and beat tracking in Carter's instrumental music*

Multiple temporalities in the music of Elliott Carter take various forms, and usually involves the simultaneous presence of contrasting speeds and rhythmic characters [Edwards 1971; Schiff 1998] made tangible through manipulations such as tempo fluctuations and local polyrhythms, and unified by the use of long-range polyrhythms [Link 1994]. The resulting musical surface is characterized by very few coincidences, irregular rhythms, and cross-accentuation, thus challenging listeners' ability to perceive clear or enduring beats. Nonetheless, from Carter's writings and interviews, it is apparent that the composer writes for a listener that is not only able to pick up on the rhetorical function of these temporal manipulations, but also to form predictions about future events, and that this process contributes to the communication of musical meaning. Although the simultaneous experience of contrasting speeds and rhythmic characters constitutes qualitatively distinct types of multiple temporalities, the perception of each of these is to some degree related to the induction of a beat. This paper takes as starting position that "polymeter", that is to say, the hierarchical structure resulting from the superposition of rhythmic strands built on different beat structures, can be fruitfully understood as a perceptual paradox, and that in Carter's music the ephemeral nature of the beat presents a possible solution to this paradox.

I will demonstrate that by activating competing beats, Carter invites the listener to engage in a form of perceptual "play" in which specific cues, such as isochronous sequences, dynamic accents, grouping slurs, articulation markings, and anacrusic gestures are used by the composer to signal beats from which the listeners' attention is subsequently deflected. In this context, complexity of texture and elusiveness of the beat prevent the integration of contrasting rhythmic strands and allow for the perception of multiple temporalities. Such an interactive process also calls for further investigation of whether informed listeners can indeed detect an underlying beat despite surface irregularities. The results of a beat tracking study conducted with active musicians of varying degrees of expertise in twentieth-century music provide further evidence that under certain conditions of structure and streaming, listeners are able to detect second-order periodicities [Demany-Semal 2002; Carson 2007; Quinn-Watt, unpublished]. The results also confirm that musicians with more expertise in twentieth-century music exhibit a lower threshold in detecting pulse irregularity without adverse effect on pulse detection [Madison-Merker 2002]. Finally, the tapping patterns of participants provide valuable information on the perceptual cues used by musicians to track the beat and the specific strategies employed by Carter to manipulate its perception.

*Beyond the "tyranny" of the Urlinie. Enger Satz and prolongations in the first movement of Franz Joseph Haydn's Quartet op. 33 n. 1*

In the musicological literature that has developed around Schenkerian studies in the past two decades, an extremely lively and productive sector of research has been constituted by the study of conceptions of form and aspects of motivic composition, mostly in an often fully successful attempt to reduce the role played by the presence of theoretical postulates considered overly "abstract" such as the *Urlinie* and the *Ursatz*. Scholars have concentrated their attention on various aspects of this field of research. While some have compared Schenker's theoretical conceptions with Arnold Schoenberg's analytical ideas, others have attempted to reflect on the concepts of "motivic parallelism" and "hidden repetition", developing a series of considerations that have led to a critical rereading of Schenker's early writings, in which the concept of *Urlinie* had not yet taken on the status of a component of the *Ursatz*, representing instead a set of structural melodic lines that belong to the intermediate or external level.

Within this sector of research, many analysts have dedicated their attention to the German theoretical tradition, aiming at identifying in the scores of the period in question those aspects that could constitute the bases of a modern concept of form. One of the most significant moments can be traced back to the second half of the eighteenth century, that saw the publication of treatises that discussed phraseological and formal aspects of contemporaneous compositions: the *Anfangsgrinde zur musikalischen Setzkunst*, written by Joseph Riepel between 1752 and 1768, and the three volumes of Heinrich Christoph Koch's *Versuch einer Anleitung zur Composition* that appeared between 1782 and 1793. The greater part of the second and the entirety of the third volume of Koch's *Versuch* are dedicated to melodic syntax: how musical phrases and segments characterized by various cadences, durations and functions can be united into periods, in order to organize large compositions such as the symphony, the sonata and the concerto.

The analysis of the first movement of Haydn's Quartet op. 33 n. 1, composed in 1781, will be carried out in two distinct phases. While the first phase will be based on the methodology proposed by Schenker in *Freie Satz*, the second will also make use of some phraseological and formal indications put forward by Koch in his *Versuch*. The use of the latter's principles would seem to be particularly effective, not only because it provides a sort of "historicization" of analytical procedures, but also because it allows the harmonic-contrapuntal structure of a piece to be studied giving particular emphasis to its surface motivic aspects and their relations in constructing musical periods. The essential form in which the most important motifs and figurations follow one another, which Koch indicates with the term *enger Satz*, becomes both the principal source of the prolongations identifiable in the score, and the foundation for inquiry on the deep structure of the piece. In this way, analysis can be carried out, at least in part, without the "tyranny" of the *Urlinie*, while the results bring out the periodisation of musical discourse as described in the treatises of the time.

**CHRISTOPH PRENDL** (Schola Cantorum Basiliensis, Switzerland)

*The first oratorio in music history: ancient modes or extended meantone?*

Pietro della Valle, a Roman patrician, traveller and composer of the early seventeenth century, is known today rather for his travel reports from the Middle and Far East than for his *Dialogo in Musica per la Festa della Santissima Purificatione*, which is, composed in 1640, the earliest known oratorio. More remarkable though is the fact that it is one of the few surviving works that attempt to combine the modes of ancient Greek music with contemporary musical practice.

The short *Dialogo* is composed for five vocal parts, which are accompanied by a *Cembalo Panarmonico* and a *Violone Panarmonico*. These instruments, precisely described by della Valle's friend Giovanni Battista Doni, a Florentine music theorist who was employed by Cardinal Francesco Barberini in Rome, were intended to reproduce the ancient modes with their specific intervallic structures.

Della Valle's *Cembalo Panarmonico* had three manuals to represent five different modes. The upper keyboard had 19 keys per octave like an ordinary *Cembalo Cromatico*, the two lower manuals had 12 keys per octave each. Doni states in his posthumously published collection *Lyra Barberina*, that the instrument had two independent sets of strings, one of which was played by the two lower manuals, the other one by the upper manual. It was therefore possible to tune the upper manual in a different temperament than the lower ones, even if perhaps constructional aspects were the reason for the two different sets.

A letter from della Valle himself strongly suggests, however, that the instrument was tuned in 1/4-comma meantone. This implies that the three keyboards served transposing purposes and that the differences between the various modes (the sequence of the diatonic semitone, major and minor tone), were not realizable. Therefore it is possible to realise the oratorio on the *Cembalo Cromatico*, because the tonal system of both the Oratorio and the *Cembalo Panharmonico* consists of 19 notes per octave.

The special appeal of della Valle's composition is the extended meantone pitch space, which he exploited by including unusual modulations. The "colours" which are obtained by this extension are used in a theatrical way to make audible the changes between different spheres or affects. An example is the passage [...] *il cielo Lasci el'aureo trono. E qui in terra si negletto [...]*, which expresses the contrast between the heavenly and earthly spheres. The *Lasci il cielo* ends with a G $\flat$  major chord which is followed by an F $\sharp$  major chord for the beginning of *E qui in terra*. Since the difference in meantone tuning between enharmonic equivalents is the small diesis (frequency ratio 128/125), the progression is heard as a succession of two major chords, which stand precisely this interval apart from each other. This creates an effect which is impossible to achieve with music composed in the common style.

**ROBERT RABENALT** (Hochschule für Film und Fernsehen "Konrad Wolf" Potsdam-Babelsberg, Germany)

*Music and emotion – a music-dramaturgical study of "affect-formation" in C'era una volta il West (I/US 1968, Director: Sergio Leone, Music: Ennio Morricone)*

This paper concerns the role of music in the formation of affects, taking as its case study Ennio Morricone's music for *C'era una volta il West*. In order to study the emotional effects of film music in the narrative-performative medium of film, I will first draw on dramaturgical categories. Secondly, I will bring out the dramaturgical premises of the chosen film examples (scenes) as prevailing conditions for the function and effect of the music. I will then offer a musical analysis to determine to what extent the film score plays a role in the formation of dramaturgical affective moments. For that, musical topoi and their semantic implications need to be considered, taking into account the larger structural context of the "affect-formation" of the individual scenes. Morricone's music does not illustrate the situational affects of the characters. Because of this, the balance between the affects of the characters and the emotional empathy of the audience can be maintained.

Through this study, it will become clear that the dramatic core is made musically present in multifarious ways through Morricone's economical compositional technique. Key to understanding the effect of Morricone's music is a consideration of his use of clichés and the mastering of strategies of "alienation" (*Verfremdung*) through the use of these clichés. The analysed strategies of "alienation" are very important for the emotional effect of his film music. Thus, another goal of this paper is to demonstrate musical topoi and their "alienation" through instrumentation, harmonic discolouration and the integration of elements of sound design (e.g. diegetic use of harmonica).

To conclude, I will investigate how Morricone's film music compositional technique is based on exploiting the interaction of "auditory levels". The basis for this is the assignment of sounds and music (by the audience) on three levels: one within the story (diegetic), another beyond the story (extra-diegetic), and finally one that mediates between the other two, which Sergio Miceli calls the "internal-mediated level" (*livello mediato*). In particular, the meaning of the harmonica, not only as a diegetic instrument in relation to the plot, will be explored through this three-level model.

**SARAH J. REICHARDT** (University of Oklahoma, Norman, United States)

*Sonata rhetoric and the hermeneutic implications in Dmitri Shostakovich's String Quartets*

Dmitri Shostakovich composed a significant number of movements in which the structure is in dialogue with eighteenth- and nineteenth-century conceptions of sonata form. Nonetheless, he consistently altered the formal and rhetorical structures; these alterations have provocative implications with respect to interpretation and meaning. Having a more thorough understanding of normal articulations of structure within the Shostakovich style, allows us to better understand how Shostakovich's manipulations of received musical gestures create moments for the emergence of original expressive meanings.

In his sonata forms, Shostakovich establishes formal expectations within his expositions, only to have the structural archetype collapse in the recapitulation, specifically at the boundary between the development and the recapitulation. Michael Mishra has described what he labels as the "arch-sonata" form, in which this major structural division is obscured through functional overlap, as the composer's "trademark" form. Yet, the concept of an arch form glosses over a consistent recapitulation of the primary theme in the midst of developmental material. Thus, an underlying rotational form, as well as the hermeneutic implication of the return of P in the midst of developmental instabilities, is ignored. In addition, Shostakovich reserves this type of alteration of form for first movements. His finale sonata structures may have significant deviations. First, the composer consistently uses a return of themes from previous movements at the climax of the development, which only add to the work's expressive potential. Second, instead of an elided move from the development to the recapitulation, often in finales Shostakovich composes developments which disintegrate to almost nothing or even silence. This gesture of dissolution creates musical space to introduce a shift in discourse, making Shostakovich's choices on what music to use to usher in the recapitulation, and its orchestration, hermeneutically compelling, as the recapitulation is thus forced to literally restart the music. In some instances the music seems to start again with old material, other times the music creates a sense of reminiscence or of a spiritual rebirth and thus transcendence (albeit mitigated). This is not a full, overflowing transcendence, but an atmospheric, ephemeral transcendence the composer fashioned for the modern era.

Acutely aware of the seemingly anachronistic conventions with which he was composing, by using and altering conventional forms Shostakovich redefined them for a twentieth-century musical subject. The composer created his own stylistic deviations and understanding his stylistic deformations of sonata form sheds light on how the composer's forms give rise to new dramatic content and afford the emergence of original expressive meanings.

**MASSIMO RIZZO** (Italy)

*Modeling sopila musical interactions: from a pitch-oriented music analysis to a relational model*  
in PANEL: Dialogic analysis

During the last part of the nineteenth and the twentieth centuries, instrumental music style of the Island of Krk, (as part of the Istrian peninsula and the whole littoral and Kvarner gulf musical areas) has been analysed by musicologists through the academic core concept of "scale". Rhythmic and timbric aspects have been marginalized and the conceptual scheme of scale was the major criterion for elaborating taxonomic evaluations of all musical practices.

In summer 2006 I started my field-research trying to understand musical facts on the bases of the pitch-oriented analytic model that I found in the literature. Over the years, I was observing that this approach corresponds to an idea of musical analysis as «part of the study of music which takes as its starting-point itself, rather than external factors» (Bent), but it was not useful to understand and interpret the strong relevance of the *sopila* (a double reed oboe) instrumental music within the contemporary social life of the island.

During my apprenticeship of *sopila* music practice, I was noticing that traditional musicians did not use the term "scale" (and even less "pitch") and I argued that they did not understand its meaning. Instead, they owned other ideas of music patterns that I tried to learn. In my paper, by means of some detailed examples, I will deal with how my analytic perspective changed thanks to the collaboration with the island of Krk's musician, and how this collaboration could be further developed.

*Structural deformation as a token of undercurrent humour in Mozart's instrumental rondos*

“Non-referential” humour is prone to manifest in structural irregularities capable of upsetting the listener’s “preparatory set” of expectations. Applying this to the First Viennese School, what would typically come to mind are Haydn’s witty formal distortions as, e.g., in the finales of the *Joke Quartet* and the *L’ours Symphony*. In accordance with the widespread view that, among Mozart’s oeuvre, even instrumental works constitute “operas in disguise”, it may be surmised that Mozart’s humour is essentially operatic, opting for caricatures of characters and situations. In reading *Ein Musikalischer Spaß* K 522 as a «parody of compositional inadequacy», Lister claims the work to have a virtual “hero”, the incompetent *Kapellmeister* it conjures up. By echoing topics derived from the style of *opera buffa*, instrumental pieces may incorporate comic elements without necessarily reenacting farcical stage situations. This has been demonstrated, e.g., with regard to subtle “slapstick effects” in the opening theme of the String Quintet K 593, to *buffa*-esque gestures in several of Mozart’s piano concertos and to the *buffo* topic in the finale of the *Prague Symphony*. However, it is also possible to trace in Mozart’s music a “non-referential” type of humour, which can be shown to operate along the lines of such complementary concepts as stylistic “markedness” and structural “deformation”. In Mozart’s instrumental rondos and sonata-rondos, deviations from formal “defaults” are generally far more pronounced than in his sonata movements proper, and, in observing a selection of such irregularities, I endeavour to challenge the implicit common view that the composer’s musical wit necessarily drew on emulating operatic or opera-like procedures. In the final rondo of the Piano Trio K 498 (*Kegelstatt*), a melodic figure, originally “tucked away” inside one of the couplets (mm. 139-145), gradually assumes a higher degree of formal significance throughout the movement, thus provoking the image of an initially shy figure, becoming more and more obtrusive. Whereas this subtle manipulation, which may be likened to Meyer’s concept of “hierarchic migration” (1989), hardly seems to relate to any of the *buffa*-esque procedures normally utilized by Mozart, it nevertheless lends itself to a humorous interpretation in terms of a witty violation of thematic hierarchy within a piece. Special attention will be given to the second movement of the Sonata for Piano and Violin K 302. I will show that the formal ambiguity of mm. 17-36, instead of being resolved, is constantly amplified throughout the movement, producing two concurrent, albeit incongruent, overall formal designs, somewhat reminiscent of a cubist painting. Whereas Haydn’s sense of humour was considered already during his lifetime an essential prerequisite for an understanding of his music, Mozart’s humour seems to have been less widely acknowledged as a central feature of his style. Allowing for Johann Georg Sulzer’s threefold distinction among “low”, “middle” and “high” comic (1777), K 522 clearly falls under the former category, involving the ludicrous and farcical. Formal irregularities of the kind discussed in this paper, on the other hand, give rise to a more refined “middle” (witty) humour, which may not necessarily be immediately perceivable as such.

*Alba cruda, alba ria. A Madrigal by Giovanni Battista Strozzi and the intonations of the second half of the sixteenth century*

*Alba cruda, alba ria*, is the incipit of a madrigal by Giovanni Battista Strozzi, the Older (1504-1571), which had special fortune in the second half of the sixteenth century; in fact, it was set to music by six different composers. The first musical version was written in 1551 by Florentine composer Giovanni Animuccia, and was included in the *Secondo Libro de Madrigali a cinque voci*, which was published in Rome. Eleven years later, in 1562, a second version appeared in Francesco Rosselli’s *Primo Libro de Madrigali a cinque voci*. During the following decade, the same madrigal was treated by three different composers: Giovanni Andrea Dragoni, in *Quarto Libro delle Muse a cinque voci*, Benigni Spiriti, and Alessandro Striggio in *Quinto Libro delle Muse a cinque voci*, respectively in 1574 and 1575; Tiburzio Massaino in 1579, used it for the *Trionfo di Musica di Diversi*. In 1584, *Alba cruda, alba ria* rose to greater attention when Cristofano Malvezzi set it in his *Primo Libro de Madrigali a sei voci*. It is probable that Giovanni Animuccia read the madrigal in Florence, where he had studied and where Giovanni Battista Strozzi worked for Grand Duke Cosimo I. It is reasonable to believe that Animuccia himself brought the madrigal to Rome in 1550, when he came with the household of Cardinal Giulio Ascanio Sforza, and included *Alba cruda, alba ria* in his first secular Roman edition. In the same year Rosselli was working as *Magister puerorum* in the *Cappella Giulia* of St. Peter’s Basilica, where, in 1555, Animuccia became Master of Chapel after G. P. da Palestrina. After the death of Strozzi the Older and Animuccia in 1571, the madrigal was set to music again, perhaps to celebrate both Florentine poet and composer. Dragoni, Striggio, and finally Tiburzio Massaino, composed musical settings of *Alba cruda, alba ria*. Dragoni was a member of the *Compagnia de’ Musici di Roma*, which was officially recognized in 1585 by Pope Sisto V, but already in the years before in Rome, cantors, instrumentalists and composers collaborated. A. Striggio was a Mantuan who lived since 1560 at the Medici Court of Cosimo I, where Strozzi’s poems were well-known. Analysing music sources, and the linguistic and literary practices of the time, the different existing versions will be compared. Textual variations and repetitions, musical elements such as organico and voices texture, the length of the madrigal, will be considered. The different treatments of the text by the composers, and the relationship between text and music will be analysed. An outline illustrating the evolution of the madrigal through the second half of the sixteenth century will be presented, showing the personal style of the composers, elements linked to a composition practice, or evidence that the composer followed the practices of a particular school.

*Transcription as a means toward analysis?*

Pierre Boulez defined musical analysis as «... a series of short-circuits ..., which do not exhaust a work but grasp certain aspects, regarding them as favoured moments». Following this line of thought, the contemporary transcription of Early Music can be regarded as *sounding analysis*: transcriptions (or “elaborations”, a term preferred by Salvatore Sciarrino) are not only occupied with the sounding surface, but also emphasize structural characteristics through instrumentation. Carl Dahlhaus considered Anton Webern’s version of J. S. Bach’s six-part *Ricercar* BWV 1079 an exemplary model for this modern approach to transcription, in which the instrumentation is necessarily derived from an analysis of the work’s inherent structure.

My lecture examines strategies of “analytical transcription” in recent works of Johannes Schöllhorn (*In nomine* after Picforth, 1994), Salvatore Sciarrino (*Esercizi di tre stili. Altre elaborazioni da Domenico Scarlatti*, 2000) and Isabel Mundry (*Non mesuré – mit Louis Couperin*, 2008). To show clearly the unusual structure of Picforth’s piece in which five different pulses are overlapping (3:4:6:8:12), Schöllhorn adds a “horizontal ritardando”. Challenged by the eccentric individuality of Scarlatti’s Sonata K 208, Sciarrino’s elaboration for string quartet opens new analytical readings by reducing Scarlatti’s already sparse cembalo realization, focussing instead on his remarkable use of melodic figuration. In Isabel Mundry’s transcriptions of two *Préludes non mesurés* by Louis Couperin, included in her cycle *Schwankende Zeit*, the specification of rhythm within a “fluctuating time frame” is derived from analytical insights concerning the differential weighting of significant notes within ornamental arabesques. The result of Mundry’s approach towards Couperin is nevertheless far removed from historically informed interpretations.

*Strong emotions, agency, and the role of “music alone”: two Arias from Puccini’s Turandot*  
in PANEL: *The induction of emotion in music*

Although problems of attributing emotional agency in music often arise in instrumental works, there is little confusion regarding agency in opera, since text and drama indicate characters in the story as fixed internal agents. However, the role of music apart from extramusical associations should not be overlooked in these less problematic cases of agency.

In this paper, I argue that purely musical features in opera can point to agency, support the text, develop the characters, and elicit strong emotions in listeners. As a case study, I analyse Puccini’s arias *Signore, ascolta!* and *Non piangere, Liù!* from Act I of *Turandot*. I approach the works from two perspectives – that of expressed emotions and that of induced emotions. Musically expressed emotions call for two separate agents for the arias regardless of the assigned characters and introduce a deeper level of understanding of the fixed agents in the process. Emotional responses draw listeners further into the work by enabling them to identify with the characters and feel empathy towards them.

This analysis employs the theories of agency discussed by Robert Hatten and Jenefer Robinson and the concept of aesthetically warranted emotions proposed by Hatten. In my examination of induced emotions, I address Hatten’s theory of markedness and Elizabeth Hellmuth Margulis’s tension types. I also highlight responses linked to the human body as studied by Isabelle Peretz and Jaak Panksepp. Several marked moments in the works are strong enough to induce peak emotional experiences. I draw on Alf Gabrielsson’s research on peak emotions and produce musical evidence for such experiences during the climax of each aria.

By examining the music in these ways, one can find new insights into the characters themselves. On the surface of the drama, Liù appears simple and compliant, and the Prince seems single-minded without regard to consequences. This emotional analysis reveals their complexity more fully by drawing out the intensity of Liù’s grief and the depth of the Prince’s compassion. In addition, viewing musical agency separately from other extramusical factors (e.g., the narrative of the opera) shows how the music supports the drama and even adds meaning to it. Finally, induced emotions allow the listener to develop a more intimate relationship with the characters, drama, and music. By sharing in the emotions of the characters and experiencing empathy towards them, listeners begin to feel like they are taking part in the opera rather than merely observing it from a distance.

*Folk music and verbal articulations in Béla Bartók's Bluebeard's Castle and his Six String Quartets: an analysis through close examination of the language*

We wish to focus our presentation on a close analysis of Béla Bartók's Hungarian language, in *Bluebeards' Castle* libretto, by the symbolist poet Béla Balázs (1911) and in extracts from the Six String Quartets of the same composer.

In Bartók's and Balázs' opera, after Charles Perrault's (1697) tale, the text concentrates on the characters, Judith and Bluebeard, and also on the description of the castle transformed into a suffering living being. From the torture chamber to the lake of tears, Bartók's music follows, step by step, in one single continuous act, the rise in power of its violence and its descent down into Hell, while keeping it very close to the inflections of popular culture and of the Hungarian diction. The words sung, as well as the music, are musically pronounced in a perfect adequacy with the Hungarian language: through a modal writing and musical thematic elements, which are intimately linked by the composer to the diction of the Hungarian language and to the researches on folk music and to the *parlando-rubato*, through Balázs' conception of the language as a corporal "expressive movement" and as "affective tunings". Bartók has been explicit about his rhythmic choices, in reference to the country folk music of Eastern Europe. There would be essentially three kinds of rhythms: first, the *parlando-rubato*, a free rhythm which he compares to the western *recitativo* or to the Gregorian chant; second, a rhythm, «more or less fixed, with regular bars»; third, a "dotted rhythm".

The whole of the work is, so to speak, built on the sound structure and the pronunciation of the name *Kéksza-kàllu* (Bluebeard). Blood (*vérés*) appears through a melodic minor second or a chord; it is an essential axis of the whole opera and divides in segments the progression of the opening of the doors, as a haunting recall, as well as it follows the moves of the characters. Played with little notes, very close to each other, accentuated on the beginning of the beat by the clarinet and after by the oboe, in a more strident way, it also represents the accentuation of the beginning of the name *Kék* of Bluebeard. It is also musically represented by a descending fourth, thus uniting Judith, *ömlik* (to spring out) and *vérés* (blood). This musical structure with the squaring of 2+2 (syllables) or 2 only, allows all sorts of stages and evolutions, as well as inter-textual connexions. The name of Judith itself, also in two syllables, whose square pattern is therefore inscribed into the name of Bluebeard, is pronounced in a dialogue with the one of Bluebeard or of certain textual elements.

In Bartók's String Quartets, perhaps in a less evident way, as the text medium is absent, the rhythmic articulations, the metric, the sound segmentations, notably marked by the ways of playing of the instruments, also form a network of movements, inflections, tonic accents, suspensions, which appear to us, so very much deeply tinged by the Hungarian language. If, as Bartók said, «within the folk song, the words and the melody form an indissociable unity», we could then go further and suppose that the influence of folk music and of the Hungarian speech, greatly determine the sound structure of the instrumental lines in the string quartets, as well as their construction.

*Example of tonal allegory in Cavalli*

In this paper I examine issues of tonality in the early operas by Francesco Cavalli. Written around 1640, the plots of the operas are influenced by the tradition of pastoral plays. Cavalli's pastoral heroines first reject love but eventually change their heart – or end up in metamorphosis. Their texts reflect their changing emotions: while confident, happy, and stable, they celebrate their freedom of mind. When experiencing emotional conflict or crisis, their expression is emotionally charged and dramatic.

Respectively, the carefree, stable state of mind is expressed with singing, while the emotional conflicts are expressed with recitative. Furthermore, the emotional contrast is reflected in Cavalli's harmonic vocabulary. The songs operate with a relatively restricted harmonic range, while the recitatives display changes of key signature and a wider variety of cadence scale degrees.

My aim is to examine these harmonic differences from the theoretic perspective of the hexachords, first suggested by Carl Dahlhaus and later developed by Eric Chafe.

According to this approach, harmonies within phrases, as well as cadence, are often dominated more by hexachordal structures than by a mode or key. I suggest that hexachordal stability and simplicity on the one hand, and flux and complexity on the other, reflect the different emotional states of the characters.

**MICHAEL SAFFLE** (Virginia Polytechnic Institute and State University, Blacksburg, United States)

*Liszt's symphonic poems: past analyses and an introduction to meta-analytical issues*

For decades Liszt's symphonic poems have sometimes been accepted or rejected on what most of us would call "analytical" issues: paradigms that most or all of these works are successful or failed sonata-forms, or that they are "controlled" by thematic transformational usages, or that they are primarily programmatic in organization and expressive detail. What, however, of meta-analytical issues? By which I mean: *analysis of the analytical paradigms themselves*.

There are serious problems with all three perspectives: Liszt did employ sonata-form paradigms, sometimes; sometimes thematic transformation comes to the fore in his works; sometimes programmism seems paramount. But all the analytical issues miss the point. Several points, actually. First, that each poem is quite different in origins, extra-musical references, and overall organization. Second, that all of Liszt's symphonic poems are primarily "controlled" by the traditions associated with keyboard fantasy traditions, which itself includes the sonata-fantasy as a hybrid, double-functional mode of expression. Because fantasy traditions are many and varied, we cannot find a single convincing pattern that fits and "makes sense" out of the symphonic poems as a collection of works. Instead, each tradition appears in many poems (but not in every one); these include the sonata paradigms I myself have identified in *Festklänge*, the thematic transformations often discussed in *Les Préludes*, and the program that introduces and seems to have shaped *Tasso: Lamento e Trionfo*. The fundamental issue is one of stylistic development. Although Liszt became perhaps a more successful and certainly a more adventurous composer throughout his life, he did not "begin" when he arrived in Weimar in 1848. For more than fifteen years he had experimented with sonata, thematic, and programmatic paradigms. In this sense the symphonic poems represent not a departure from his previous practices but a consolidation of them. Brief but significant examples from at least six of the symphonic poems will demonstrate that approaching Liszt's "mature" works from this perspective fundamentally alters not only our understanding of how his music works, but of his career and contributions to the nineteenth-century European musical literature.

**DAMIEN SAGRILLO** (Université du Luxembourg, Luxembourg)

*Scales, melodic traits and forms in German folksongs. Automated folksong analysis by EsAC*

**Historical Background.** At the end of the 1980s Helmut Schaffrath (Essen/Germany) conceived the "Essen Assoziativ Code" (*EsAC*) for encoding one-part songs. Being one of many encoding facilities, it was specially developed for folksongs of Central Europe. In parallel, a software package was realized in order to analyse the song data. It allowed not only the digitization and the preservation of a large corpus of usually orally transmitted tunes, but furthermore the interpretation of multiple musical factors in relation to folksongs. Meanwhile, thousands of songs have been encoded or transcribed to *EsAC*, so that today the *EsAC* database includes a large corpus of songs from Germany, from other European countries, from Israel and even from China. Some of these databases and the software package are online and can be downloaded from different sites, for ex. (<http://www.esac-data.org/>). I will start my presentation with a short overview of the beginnings of *EsAC* in the late 1980s, showing that the impact within the scholar community was significant with an own Study Group in 1985 becoming the main forum for scholarship in relation with *EsAC* and automated folksong analysis.

**Functionality.** Primarily, *EsAC* is a machine-readable, mnemonic code for one-part melodies. Secondly, the software package for folksong analysis was conceived to suit with a large data submission.

**Method.** With the help of code and software, the scholar will be able to use the immense features of *EsAC*. I will give some insights into my analysis in relation to scales, melodic traits and forms in German folksongs, being the largest corpus of *EsAC* encoded songs and including more than 7000 folksongs of Central Europe. But honesty also demands to raise the question of the limits of an automated song analysis for a better understanding of the music of German folksongs in particular and for one-part songs in general. On the one hand the gain of time is remarkable. Many time-consuming procedures can be abbreviated, due to the fact that recurrent stereotype steps are suitable for mechanization. On the other hand, it must be emphasized that a fully computerized song analysis is not free of problems. Thus, mathematical correct results do not necessarily lead to a doubtless musical interpretation. The machine needs the interaction with the rational and musical sensible specialist.

**Results and Outlook.** The complexity of German folksongs is considerable concerning structure and scales on the one hand, but, on the other hand and compared to other corpora, it is relatively homogenous concerning range, melodic clichés and commonplaces. Today *EsAC* ought to be adapted to contemporary needs. To achieve this goal, it needs the collaboration of a musicologist with a computer scientist and a neuroscientist to bring together musical knowledge and cognition with optimized EPD. One of the powerful features of *EsAC*, the enormous data handling capabilities, could enable the description of heterogeneous idioms of one-part songs with the abstraction and illustration of local, regional, not to say national prototypes.

The relation between music and death is not only metaphorical, but also structural – a fact exemplified by numerous compositions of the second half of the twentieth century. Whereas the hermetic avant-garde music of the 1950s was defined by a serial organization of pitch, duration, amplitude and timbre, in the 1960s composers started to musically reflect on topics such as the Nazi-crimes of World War II. Death as a psychologically repressible, but not eliminable incident was not only musicalized in this context, it also represented (and still represents) a platform for compositional challenges. Particularly composers of contemporary music try to find sounds for an unfathomable phenomenon, creating them literally out of the void while simultaneously trying to construct a void. Can this supposed paradox be solved?

According to the musicologist Volker Kalisch there is a close structural correlation between music and death revealing itself via a naturally determined perception of music as organized time that reflects human mortality.

*Atmosphères* for large orchestra (1961), *Requiem* for soprano, mezzo-soprano, two mixed choirs and orchestra (1963/65, revised 1997) and *Lux aeterna* for mixed choir a cappella (1966) by the Austro-Hungarian composer György Ligeti (1923-2006) are worthwhile examples for a musicalization of death based on a close union of content and form. The sombre metaphor of death pervading these compositions reflects Ligeti's own past during World War II and as such represents an essential artistic motivation. On the other hand a specific timbral and structural design causes an almost omnipresent mood of death. One characteristic element of the musical language of these three pieces is the explicit composition of silencing (represented by tacet-bars) which can be read as an embodiment of the unmentionable experiences suffered by Ligeti during the fascist oppression that led to the extinction of almost his entire family.

The analysis of the chosen examples shall expose the link between a content-based compositional impulse and a purposely developed musical language.

Liszt composed on the whole eighty-seven *Lieder* for voice and piano, but the number increases if we consider the multiple settings of the same text. Taking as basis the chronological division of the composer's songs production in three periods proposed by Rena Charnin Mueller, this research intends to analyse the compositions belonging to the last phase, more exactly the *Lieder* created between 1862 and 1886, with particular consideration for the multiple settings.

In his songs Liszt shows two main characteristics: the tendency to return on the same text due to the aspiration to find new solutions and his so called "conceptual duality" (Mueller), i.e. the incessant mutual exchange between instrumental and vocal compositions.

During the years Liszt's *Lieder* make increasingly use of transitional sections based on chromatic and enharmonic processes, while the form progressively abandons traditional schemas. Both these elements will be analysed in the present study: in other word, the formal preferences and the dissolution of conventional harmonic-tonal procedures.

In some cases, like in the second setting of *Der tote Nachtigall* (1878), the reworking does not consist in a change of prospective, but in a sort of "disembodiment" of the structure used in the earlier work. In other songs the new setting shows the signs of a new sensibility for the word, accompanied by a parallel relativization of the tonal language. In the latest version of Petrarca's sonnets, for example, we can observe a more sober and unadorned vocal line, in which the semantic substance of the word is in the foreground. The musical structure reaches the highest flexibility, revealing a contiguity of conception with the piano works of the same years. A paradigmatic example is the *Lied Was Liebe sei?* While in the first and in the second setting tonality and melodic profile are clearly determined, in the third one, composed in 1879, the composer searches for new horizons. The key measures and the motivic materials are in common with the earlier settings, but the simple accompaniment suggests centrifugal resolutions of the diminished seventh chord, while the overlapped triads make the sense of tonality weaker. The text declamation is very near the inflections of the spoken language. The same suspended final chord we can hear at the end of this song appears again in *J'ai perdu ma force et ma vie* (1872). In this *Lied* the tonal poles of the formal articulation are confirmed more times during the composition, thus the dissonance without resolution has not the primary function to hint to an innovative harmonic syntax, it rather emphasises the dramatic essence of the text.

*Domenico Scarlatti's keyboard fugues*

Most of the research literature dedicated to Domenico Scarlatti's Sonatas has focused on its philological and analytical aspects. In most cases, these studies – instead of clarifying their history or structure – brought to surface the many inconsistencies that characterize his sonatas. Each of them presents a variegated pattern and possesses unique aesthetic and musical qualities. Most scholars have focused their research in an attempt to understand the context in which his production germinated, confronting themselves with problems like the Iberian influences and the manuscripts. In the specific case of the analytic approach, we can trace an ancestral misinterpretation of his sonatas: most scholars interpreted these pieces as forerunners of the sonata-form of the Classical period.

The great vacuum that still wafts around Domenico Scarlatti's production can be traced back to those aspects that have determined its fame. For instance, the Iberian elements have always brought to believe that the entire *corpus* had been composed during his stay at the Spanish Royal Court, without taking into account other important aspects, such as his composition training. Domenico was born in Naples, in 1685, and he started his composition training with his father, Alessandro Scarlatti (1660-1725), proceeding with Gaetano Greco (1657 ca.-1728), Bernardo Pasquini (1637-1710) and Francesco Gasparini (1661-1727). All his teachers were affiliated to the Neapolitan School but this facet has never led to a juxtaposition between his production and the School. Therefore, the great innovation of this research stands in the identification of those elements which are peculiar to the Neapolitan School and that are traceable also in Domenico Scarlatti's production. In such a limited context it would be impossible to do an omni-comprehensive research, able to touch Scarlatti's entire production. Therefore, in order to grant a theoretical approach that will not result ineffective and that will disperse the peculiarities of Domenico Scarlatti's music, this work will focus only on his keyboard fugues, a small *corpus* consisting of only 6 compositions (plus two of uncertain attribution).

This research will outline those general characteristics of the keyboard fugues of the Neapolitan School, which are also common to Domenico Scarlatti's fugues. Going through manuscripts, manuals and compositions that belong to this tradition, will allow to narrow down and focus on those aspects that distinguish these fugues from those of other traditions. At last, this path will also help us to better understand a small portion of Scarlatti's work and create a solid base from which we can trace further elements that have never found a right context.

*The function of music in the development of empathy in children: the construction of the educative path Music and well-Being and the evaluation of its effects*

Empathy is defined as the ability of individuals to recognize and share in a vicarious way the emotion felt from another person and to understand the situation trying to put him/herself in the other's shoe in a refined way in the course of development. Since preschool age, empathizing with the experience of others helps to apply the adaptation to pro-social behaviour. Moreover, empathy helps to regulate the flow of negative emotions and reduces the aggressive effects towards others, it helps the communication and it encourages to welcome differences. So, empathy is the fundamental ability to build positive interpersonal relations and the well-being of children, and it is important to promote it with efficient training courses.

One of the most involving experiences that music can offer is to provoke profound and meaningful emotions following its own logic that is different from the verbal language. This ability to raise the level of our emotional life isn't the only characteristic of this art. In fact music can adopt a formative worthiness (educational, therapeutic and aesthetical) of extraordinary importance and can help children, especially in preschool age, to have meaningful experiences.

In the present research, the authors examined the contents and the methods of the educative path *Music and well-Being* (that uses global musical activities based on listening, and on vocal and instrumental production) in order to check its efficiency in improving empathy and vocal ability in a group of four year old children.

*Participants:* 40 children of about 4 years of age that attend two kindergarten classes (20 experimental groups; 20 control groups).

*Procedure:* The research has been done in three moments: 1- pre-test; 2- training; 3- post-test. In the pre-test and post-test stage the researchers asked each child a self-value interview to measure the empathy in answer to picture stories in which the protagonist would feel joy, sadness, fear, anger. During the training state (only for the experimental group) they did an educational course (*Music and well-Being*) made of 24 meetings week terms of about an hour each. Following the value of the "active method", they have tried to favour personal harmony moments to arrive at the point, rush and extend the possibility of social-emotional relationships and relate the more meaningful and formative possible. The results show the educative path *Music and well-Being* has been efficient in improving the empathic ability of children towards all emotions considered (joy, sadness, fear, anger) and above all towards emotions of negative hedonic tone. This is important because to empathize with negative emotions like sadness and fear helps pro-social behaviour in children, and empathize with anger others reduce their aggressive behaviour. Music, that "is a game for kids", can represent an important instrument useful to promote a positive interpersonal and social development in children and to improve a positive atmosphere in the class group.

**JOHANNES SÖLLNER** (Hochschule für Musik Freiburg im Breisgau, Germany)

*Twelve-tone improvisation – Towards the improvisational potential of dodecaphony using hexachordal combinatoriality*

Dodecaphonic music, with its complex structures of organisation, seems to conflict with the concept of improvisation. The Second Viennese School uses a multiplicity of compositional techniques to achieve these structures. Can these principles be utilized for improvisation, and if so, how?

In Schönberg's *oeuvre*, the *Phantasy for Violin with Piano Accompaniment* op. 47 is probably the closest to improvisation. Disregarding the Prelude op. 44, it's the composer's only work referring to improvisation already in its title. Both its form and its textures show improvisational traits. Furthermore, Schönberg uses the phenomenon of hexachordal combinatoriality, first described by Milton Babbitt. Two forms of one single twelve-tone row possess hexachordal combinatoriality, if the two first and the two second hexachords complement to the aggregate. This paper will present an easy and fast algorithm enabling to check a tone row for hexachordal combinatoriality, without depending on intricate calculations or set class lists and similar mathematical tables. Dodecaphonic pieces, both for solo instruments and for several players, can be improvised by means of such a row capable of combinatoriality and an appropriate improvisational technique.

The procedure that has been presented will be demonstrated practically: at first a twelve-tone row given by the audience will be checked for hexachordal combinatoriality using the introduced algorithm. Then a twelve-tone improvisation based on this row will follow.

**MICHAEL SPITZER** (University of Liverpool, Great Britain)

*Analysing fear in Schubert*

**E**motion affects cognition; in some ways, it is a form of cognition. When we are happy or sad, we perceive the world differently, and even think and behave differently. In Jenefer Robinson's words, «emotions regestalt the world in line with our wants, goals, and interests». How might “regestalting” work in music analysis? The present paper focuses on a single piece, Schubert's *Unfinished Symphony*, and on a specific emotion, Fear. Threat, struggle and defeat – the “victim narrative” of the *Unfinished Symphony*'s first movement is remarkably clear for a piece of instrumental music without text or programme. After the mysterious introduction and tremulous tonic group, the tender persona encapsulated in the second subject is overcome by the eruption of dark forces. Its meaning patently obvious, Schubert's trajectory draws its clarity and power from an underlying archetype; this archetype, I shall argue, is more an ecological affordance than a social construct. Drawing on Arne Öhlman's threat imminence trajectory, which registers the advance of a threat in terms of psychophysiological effects on the subject, I analyse the successive junctures of Schubert's work in terms, respectively, of 1) Threat [introduction]; 2) Orienting [first group]; 3) Freeze [second group]; and 4) Strike [development] responses. I approach this trajectory via three analytical perspectives. First and foremost, via theories of expectation, arguing that Öhlman's model contributes a much-needed normative connection with emotional categories. So far, psychological studies of musical expectation have been neutral with respect to distinct emotional concepts such as Fear. Indeed, they are overly focused on future events, and neglect issues of memory. Secondly, I claim normativity for this model also on the level of Hepokoski & Darcy's concept of the Romantic minor-key sonata-form exposition (especially when the second group is in the submediant). Thirdly, I relate the results of an experiment at the Sonic Arts Research Centre in Belfast, which measured galvanic skin responses of subjects listening to the Schubert (including those of the author). These results supply remarkable confirmation of Huron's hypothesis that certain passages in music elicit a “freezing” response in the listener.

Recent hypotheses noted two principal trends in the comic production for musical theatre: the first one stages the real life (as in Mozart's operas), called "daily" realism, and the second one called "grotesque", in which the comic is inclined to farce, as in several of Rossini's titles. Other studies identified two other important opera acting's courses: "dramatic" type and "*ludus*" type (Gallarati). Both are common with a lot of comic operas in the eighteenth and nineteenth centuries, including Rossini's theatre and specifically the *Barber of Seville*. Its musical forms, and generally Rossini's music for comic theatre, can be examined as an action dramaturgy of which these are the principal aspects: "metaphor or allegory plane" in opera's subject; "*detronizzazione burlesca*", with the "reversal" and the central use of "mask" and "camouflage"; "word's destruction", or «its rhythmic reduction» (Rognoni), which causes an alienating effect in the characters.

This is the point of contact in the passage from music to performance plane. Indeed the technique of marionette is connected with estrangement: the character, without thoughts or action, is unconsciously captured by a power that transcends him/her. He/she becomes inhuman through mechanical movements and then vanishes in *stretta*'s pure rhythm and sound.

Dario Fo's performance realized for Nederlandse Opera of Amsterdam in 1987, following partially Jean Pierre Ponnelle's lesson, attempts a translation of Rossini's theatre view. He creates a performance in which solutions apparently start up from music. Fo portrays his work in this way: «Following the spirit of Rossini's music, the direction spontaneously gushed [...] I've been driven by this extraordinary music. All my ideas come from the music, without any effort. I have seen in the music the delineation of all situations: irony, game [...] corianders and madness». Twenty years later, it's time to sum up: Does his direction really serve Rossini's musical forms and aesthetic? Did Fo change something in Rossini's performance? Following an important work of Christopher Cairns, we will identify some central categories in Fo's idea of the theatre and we will analyse their relationship with Rossini's musical forms. We'll see some performance's moments and an accurate selection of the preparatory documents (over 180 drawings) by Dario Fo for the Amsterdam's stage.

This paper proposes an approach to music drama from the standpoint of types of narration which configure dramaturgical plane and total narrative structure. If in music drama music has, in Joseph Kerman's terms, a part of «an intermediary in imaginative articulation» of the action, then musical layer has, together with the textual one, its function in articulating various types of narrativity.

Consideration is hereby focused particularly on strategies of explicit narration as a part of complex relations of musical and verbal text. It starts with analysis of the text, i.e. with examples in which one of the characters assumes the role of narrator in order to tell the story outside the main stream of narration. In this way, the act of narration is situated on "intradiegetic" level (Genette), representing, at the same time, a situation in which the narration itself is being told, that is, an "explicit narration" (N. Soelberg). In music drama we often find examples of explicit narration appearing after announcements: «Now I am going to tell you a story», or «Here is what he says in his letter...», where narrative mode includes different degrees of distance between the narrator and the story.

Such examples of "embedded narratives" always include a temporal extension of the main narrative thread influencing thereby the change of the kind of temporality.

The paper examines them through examples from the field of French *drame lyrique*, from different epochs: from operas *Roland* (1685) and *Armide* (1686) by Lully, *Les Troyens* (1856-58) by Berlioz and *Pelléas et Mélisande* (1892-1902) by Debussy, where, in spite of different stylistic contexts, similarities in musical transposition of structures of explicit narration are established.

*The use of "Galant Schemata" in the Napolitan didactic of counterpoint:  
the Regole del contrappunto pratico of Nicola Sala*

Nicola Sala (1713-1801), was a pupil of Nicola Fago and Leonardo Leo at the Conservatorio della Pietà dei Turchini where he was a teacher from 1787 to 1799. His enormous treatise *Regole del contrappunto pratico* was printed in 1794 with the patronage of King Ferdinando IV Borbone by the Stamperia Reale. Even if his public fame was soon obscured, nevertheless, within the followers of Leo, the tradition contained in his *Regole* survived for about one century.

One of the main aspects of the treatise, together with the particular presentation of all the contrapuntal features, is the presence of a didactic hyper-text addressed to the teaching of the "Galant Schemata".

As Galant Schemata I mean:

- 1) at a basic level, patterns of contrapuntal diminution typical of the Galant style;
- 2) at a medium level, the kinds of harmonic-melodic patterns investigated in depth by Robert Gjerdingen in his *Music in the Galant Style*.
- 3) finally, at the highest level, the formal schemes for sacred compositions such as antiphons and others presented in the third part of the treatise.

My paper is devoted to the first two levels. First, examples in counterpoint, based upon the scale as *cantus firmus*, show several exemplars of the first category: many diminutions are obtained through a process that I have called "gemmation". In other words, the simple line of counterpoint in first species is expanded through diminutions. The use of the scale as *cantus firmus* produces a kind of counterpoint often based on different kind of sequences. Some examples are based on the flourished versions of the ascending 5-6 and of the descending 7-6 (as an alternative version of the "rule of the octave").

The second important aspect of the treatise is the use of the Galant Schemata according to the meaning given to this definition by Gjerdingen. The great quantity of *exempla* contained in the treatise shows several kinds of schemata, often not in a casual way. Some of them are clearly devoted to single schemes as "demonstrative examples". A fugue of the second part, just to give an example, is devoted to the "*indugio*" (a particular pattern marked out by a motion in parallel sixth between bass and soprano to prolong the IV delaying the cadential V) [part II, pp. 62-65]. The other schemes of the Galant music are, step by step, presented, in the same way, inside the fugues.

To conclude, the *Regole* are an important testimony of a didactic conceiving in which the pupil was totally surrounded by music through his daily apprenticeship with the *maestri*, through the study of the *exempla*, through the musical experiences done as a listener as well as a player in the churches and in the mansions of Naples. All this work was addressed to the "shaping" of young professionals perfectly instructed in the Galant style.

*Liszt and the piano concerto form: structural novelty and tradition in the Concerto n. 2 in A major*

Liszt was intimately familiar with many of the works in the piano concerto genre of his predecessors and contemporaries; he played Romantic and Classical Concertos; he played and transcribed Weber's *Konzertstück* and Schubert's *Wanderer Fantasie*. Liszt reserved his attention to the concerto form for piano and orchestra for many decades, experimenting new formal solutions; he wrote and revised many times some of his works; among them the Concerto n. 2 in A major.

The composer drafted the Concerto n. 2 in the isolation of San Rossore in the summer of the 1839, some months before the resumption of his virtuoso concert activity. He completed a score for piano solo and a full orchestral score, but the work was set aside. In 1849 he finished a second version, but the Concerto again remained unperformed and unpublished; the same thing in 1850 and again in 1853. It would be only on the 1<sup>st</sup> January 1857, at a distance of almost twenty years from the first conception, that Liszt directed the first performance from the podium of Weimar Theatre, with the solo part taken by Hans von Bronsart. Although the performance received clamorous approval Liszt still hesitated about publication that would come in 1863 by Schott. In spite of various versions, the earliest for piano solo [Rugginenti, Milano 2006] and the final one for piano and orchestra have been published. The other versions survive in manuscript sources held at the Goethe- und Schiller-Archiv of Weimar.

This study analyses the various versions of Concerto n. 2, both published scores and manuscripts sources, in order to establish the concerto form elaborated by Liszt during twenty years.

The first issue that it will be discussed is: what changes did Liszt make in the Concerto from the early to the last version? Did he maintain the original formal structure or transform it because of the influence of the contemporary creation of the symphonic poems? The second question is linked to the term "symphonique": why Liszt erased the term from the title of the 1850 version? What value did Liszt assign to this term? Did it give evidence of Liszt's concept of concerto?

The inheritance of previous works, especially by Weber and Schubert, was fundamental in the elaboration of the formal design of Lisztian concerto, so as the Schumann's discussion about a one-movement composition had a strong influence on the evolution of this genre.

The Concerto n. 2 is an organic one-movement work based on the thematic transformation in which are retained both the design of exposition, development and recapitulation and the idea of multiple movement; the segmentation is suggested both by the cadenza that functions as transition section and the agogic changes. Are these reminiscences the only classical features that persist in the Lisztian Concerto n. 2?

Many scholars of popular music such as Middleton, Tagg, Moor and Fabbri have long sensed the limits of a traditional analytical approach, essentially based on the score, in a context dominated by multimedia expression. My focus will be to demonstrate that, after years of the proliferation of video music, film techniques have ended up conditioning how songs are composed insofar as they determine, in part, their form and sound.

The point of reference in my analysis will be Nattiez' tripartite semiology and in particular I will analyse songs at the “poietic” level to judge if it is an artistic “product” originating in the recording studio; as their creators are often our contemporaries we can quickly assess the process of composition-arrangement-recording. Another mainspring of my analysis will be the notion of “sound-box” coined by Moor [2002], a scholarly Englishman who covered this from the aesthetic standpoint, neglecting that “poietic” which I will now try to amplify. The “poietic” equivalent of the “sound box”, the “aesthetic” level, is the mixer in the recording studio and in popular music the “poietic” level often coincides with the “neutral” level since recordings almost completely replace the score, although publishers continue to publish traditional notation for commercial purposes.

To start my analysis I will use a sample score by the Italian singer-songwriter Tiziano Ferro. Analysing Ferro's work you see that he makes use of a recording technique very similar to that used in film, so much so that I am inclined to borrow the notion of the “tele-camera” from cinematic language, which I will substitute with “audio-camera”, and instead of “editing” I will use “mixing”. All Tiziano Ferro's output originates in the recording studio and the spatial movement created by the mixer between his voice and the accompanying instrumentals is present in almost all his songs, so much so that they constitute a recognisable stylistic feature.

In Ferro's works I have identified recording principles exactly like those used in video recording. These are:

- 1) *Reverse-sound*. Similar to the “reverse shot” in which people are framed and “switched” – the sound is split and mixed with different levels of volume.
- 2) *Sonorama*. Like in the “panoramic” data from the “long shot”, all the available space fills the groove by means of exuberant instrumentals within the various registers and the layering of the same singer's voice recorded an octave higher.
- 3) *Zoom-sound*. The “audio-camera” recaptures a word and causes it to come to the fore.
- 4) *Sound-back*. This happens when a track's atmosphere changes through an improvised digression.
- 5) *Sound-imprinting*. The “video-camera” hones in on a particular effect of the voice highlighting the “track” with regard to the “significance” rather than the “signification” [Barthes 1982].

In the library of the Conservatory San Pietro a Majella in Naples there are several notebooks compiled by Nicola Zingarelli (1752-1837), a celebrated composer who also was the first single director of the Real Collegio di Musica, the heir of the four ancient conservatories. At Zingarelli's times, the (once glorious) school of music was in deep crisis. The teaching methods were basically the same as in the early eighteenth century, but the direct, oral tradition was slowly disappearing, prompting the last witnesses to write down most of the notions they received from their masters.

The Zingarelli manuscripts, therefore, testify not only the methods, theories and ideas he applied in his teaching, but also those of earlier masters such as Fedele Fenaroli, Francesco Speranza, Pasquale Anfossi and Antonio Sacchini.

The survival of Zingarelli's notebooks is probably due to the librarian of the Real Collegio Francesco Florimo, who was Zingarelli's student and admirer. In his *Scuola Musicale di Napoli ed i suoi conservatorii* Florimo wrote: «Sono stato insieme collo Zingarelli per quattordici anni, prima come suo allievo e poscia più lungamente come Archivista dello stesso Collegio [...]. Potrò errare, ma non potrò esser contraddetto da chi non lo ha trattato da vicino; perché Zingarelli è tale un uomo, che, per giudicarne, bisogna averne avuto intima conoscenza» [vol. II, p. 406].

Most of the exercises contained in the note are listed as “solfegei”. Essentially Zingarelli's solfegei are short compositions for one or more voices, without words, in many different styles, with continuo.

My research analyses the different styles of Zingarelli's solfegei and explores their didactic uses. In fact this type of exercises was common to all the students of the Conservatory: it was an exercise not only for singers, but also for performers and composers. For this reason, San Pietro a Majella's sources are heterogeneous; we can identify solfegei for singers in the manuscripts called *Scale*, *salti e solfegei*, solfegei for players written according to the Neapolitan rule “chi canta suona” (who can sing, can play) and solfegei for composers.

In fact, in the eighteenth century Neapolitan conservatories the “secondo maestro di canto” was also a composer, and had to write solfegei for his pupils. They in turn also had to learn how to write a solfegegio, as the first exercise that did not require a “canto dato” (given melody); the solfegegio was, therefore, also the first exercise in *composizione ideale* (free composition).

*The fourth piece of Schumann's Kreisleriana, op. 16, as a musical fragment:  
discontinuity and unity intertwined*

**A**t the turn of the eighteenth and nineteenth centuries, writers Friedrich Schlegel and Novalis established the literary fragment as a significant genre. In spite of its historical importance, the precise nature of a literary fragment is, however, hard to define. This difficulty is in part an outcome of the coexistence of two characteristic features that apparently exclude each other: inconclusiveness and inner cohesion. Several recent writers have suggested that the ideals of fragment were important for Robert Schumann, a composer with a keen interest in literature. When the concept of fragment is applied in discussions on Schumann's music, the writers have mainly referred to musical factors that create a sense of incompleteness.

This paper analyses the fourth piece of Schumann's *Kreisleriana*, op. 16, interpreting it as a musical fragment. This piece clearly includes the kinds of factors that have been associated with musical fragments: it features no cadences that clearly establish keys and it includes sudden and apparently unmotivated harmonic and emotional juxtapositions. Yet I will argue that there is also a large-scale harmonic logic underlying the work. In short, I shall suggest that Schumann's piece includes the two apparently contradictory aspects associated with Romantic literary fragments: incompleteness and inner cohesion. Thus the work reflects the general aesthetic ideals of its time. The analysis elucidates the interrelationships between these two aspects of the work: 1) Incompleteness. The musical surface throughout escapes the sense of being firmly rooted in any key. Instead, the harmony remains open for the most part, occasionally even outright ambiguous. 2) Inner cohesion. The middleground voice-leading structure, described from the Schenkerian perspective, constitutes a coherent (albeit highly idiosyncratic) prolongatory framework.

*Analysis of expressive singing in children 2-3 years old*

**S**tudies on musical structural aspects, in their relationship with emotions, mainly in instrumental performance, have been carried out with the aim of highlighting the process of managing physical sound properties in order to produce an expressive performance [Imberty 1986; Juslin, Timmers 2010].

When we look at research carried out on vocal musical expression, we can observe that they have been conducted on both spoken [Forde, Balkwill 2010] and singing expressions [Baroni, Finarelli 1994; Baroni *et al.* 1997]. These studies tackled in particular the role of variations in loudness and tempo and have been carried out with adults. What could happen with children? At what age could they start to use a certain kind of expressivity when singing?

The observation of sophisticated emotional communicative abilities shown by infants leads us to think that there has been a prenatal experience of the emotional life of their mother [Parncutt 2006]. Through the dialogues with her after birth, dialogues spoken [Trevarthen 1999/2000] or sung [Tafuri 2007], we agree with Juslin and Timmers [2010] that infants could continue to assimilate, and then to recognize, the expression of the emotions, and, at the same time, to assimilate some musical structures (pitch, loudness, rhythm/tempo etc.) that convey those emotions.

We hypothesised that, due to the early experience of children, they could start to use expressive musical communication in early childhood.

The aim of the present research is to answer the following questions:

- 1) Are the children of 2-3 years old able to sing in an expressive way?
- 2) If yes, which kind of structures are they able to manage?
- 3) What is the role of context in favouring their expressivity?

The author analysed a *corpus* of songs performed by the children of the *inCanto* Research Project [Tafuri 2007], a longitudinal research carried out by J. Tafuri and D. Villa that offered systematic music education to a group of children accompanied by their parents, from the last pre-natal stage to 6 years. The songs collected from 37 children 2-3 years old have been analysed through the software Sonic Visualizer in order to highlight the children's use of agogics and dynamics.

The analysis of the songs performed by the children revealed that already at this age it is possible to observe a certain ability in managing some musical structures. Nevertheless, there were plenty of children who had fun with the songs by introducing variations in resonance or of speed, intensity or even variations in the melody. Their expressive communication with parents in their everyday life, since their birth, favoured a first intuitive assimilation of the principal codes used in speech and sung in their own culture.

This presentation will conclude with some consequences for music education.

This paper presents the results of a research about the melodic forms used by composers of the “Giovane Scuola” (Puccini, Mascagni, Leoncavallo, Giordano, Cilea). The research has analysed the evolution of the structure of the Italian *cantabile* melody in a historical moment when the traditional “lyric form” model (a particular type of binary form, which had permeated Italian opera until the sixties of the nineteenth century) loses its supremacy in favour of new melodic models. Within the new musical dramaturgy of the last decade of the century the *cantabile* melody keeps its key role, but the principles of its building begin to change.

The operatic melody observes a musical rhetoric of progressive accumulation of tension which will fire off in the high notes of the voice, where the highest level of musical intensity is reached and the singer has the possibility to show the beauty of her or his timbre (the *cadenza*).

The research shows how new melodic models develops from the old lyric form, which remains frequent but it is not the only option in the composer's hands. Another very frequent option is the so-called *Barform* [G. Pagannone, *Puccini e la melodia ottocentesca. L'effetto 'barform'*, in *Studi pucciniani*, III/2003, pp. 203-223]: it is a particular type of “sentence” [W.E. Caplin, *Classical form: a theory of formal functions for the instrumental music of Haydn, Mozart, and Beethoven*, Oxford University Press, 2000] in which the “continuation” has a strong increase of musical tension and a rise to the highest notes of the register. This model is apt to express an immediate outburst of emotion and therefore suitable for the realistic representation of the *verista* opera.

The third very common melodic model in the operas of the Giovane Scuola has not been already described by theorists: it is a sixteen-bar period in which the omnipresent expressive intensification of the melody is set within the consequent module. I give to this melodic structure the name “lyric period”.

The common feature of all this models is to be strongly shaped on regular four-measure modules: this principle of regularity remains the most frequent option. Nevertheless melodies with four-measure modules very often try to hide their symmetry by means of other musical parameters (harmony, melody, texture). A too evident symmetry would have given to the melody an outmoded style and composers had to obfuscate the appearance of symmetry, if they wanted to keep its structure.

For the same reason the relation between the phrasing structure of the melody and the metrical structure of the verse gradually tends to shatter in a reciprocal asymmetry, in order to give more spontaneity to the textual prosody.

The research aims to spread light upon a topic which has been studied only in a perfunctory way and never through a comparative approach among the various composers. Its results may help to better define the feature of Italian operatic melody at the turn of the century and to understand the means by which it tries to reach the listeners' emotional involvement.

Although it towers over Ligeti's early works in substance and value, String Quartet n. 1 is a piece that has been less explored, compared to the author's String Quartet n. 2. *Métamorphoses nocturnes* appears between 1953 and 1954, in an open-boundaries genre map, defined by a strong stylistic divergence. Chronologically, it lines up closely to notable pieces such as Shostakovich's String Quartet n. 5 (1952), Enescu's String Quartet n. 2 (1951-1952) or Crumb's String Quartet n. 1 (1954). *Métamorphoses nocturnes* stands out as an intersection of paradigms, leaving open to the investigator the option of a multi-angular access.

Using a sole melodic motif apparently extracted from Bartók's piano piece *Klänge der Nacht*, the Quartet develops a set of syntactic and language characteristics that confer on this Budapest period work a gesture of reverence to Ligeti's outstanding predecessor. The arch form structure, the continuous variation technique and the fusion between chromaticism and diatonicism all highlight a compelling interconnection with Bartók's universe. Ligeti cuts up and transfers into his work a germinative melodic cell from Bartók's aforementioned piece. He endows this entity not only with morphological weight, but also, by crossing the discourse from beginning to end, he attributes a vector property to this melodic figure.

Our emphasis on the turning point of the musical texture in Ligeti's composition concept emerges from the contrast between the five constitutive sections of the arch form and the coda segment. Whilst the constant transformation technique of the generative motif in all five sections polarizes titles such as *Musica Ricercata*, *Six Bagatellen für Bläserquintett*, the coda conceals a stylistic border zone, establishing an idiomatic link towards titles of the following decades, such as *Glissandi*, *Apparitions*, *Atmosphères*. It leads directly to the meta-language of sonorous fields and static blocks projected beyond any gravitational space, where musical parameters dissolve into a unique one: the timbre colour. One may interpret the coda fragment as an eclosion moment, which maps out the separation line between the creative phase tributary to Bartók and the moment of birth of a new aesthetics. *Métamorphosis*, in the deepest sense of the word, condenses in this additional segment: the innovation coefficient is embodied by the novel *brouillage* effect (*glissandi* on the harmonics of the four instruments in a high register). The coda segment opens a gate towards a new creative identity and assumes the function of an optical prism, through which one could discern connections with characteristics of his next stage of musical creation.

The title's declared metamorphosis required a multi-level semantic decoding, but the analysis finally provided all the arguments in order to consider String Quartet n. 1 synonymous with Ligeti's definitive stylistic conversion.

*Tonal and no-tonal in music for the cinema; usage in relation with settings and emotions*

The study is based on the assumption that there is consistency of signification between movie narration and the music which was created for it, and that such consistency allows the integration of the languages interacting in the movie and their confluence into a multiple composed object. The question which the essay aims to answer is: in such a setting of adherence to movie narration, which settings and significances do tonal music and no-tonal music bind or relate to? Which are the likely significances pertinences of each? The object of the research may take for granted a data which is not at all granted: the border between tonal music and no-tonal music is definite. In film music, which is a melting pot basin of contemporary musical experience, you can easily find music lying in a territory, where tonal and no-tonal live together.

To the purpose of this study, the term "tonal" has a linguistic meaning: in our culture, music has a meaning which is interpreted by the linguistic code which was acquired in the acculturation stage. In the area of tonal music we do not include a type of music where it is possible to identify – even though only at perception level – traits of formal pertinence amongst rhythm, melodic, rhythm or timbric cells within a group of sounds. The sense of tone is based on the ability to linguistically recognize music cells, and to appreciate the system of relations which lie amongst these cells. The term "tonal" has therefore been used as synonym of recognizable according to the code of our mother musical tongue. The difficulty (probably the impossibility) to establish a defined border between the two fields should not be used as sophism to rule out what is evident in the common experience.

The object of the analysis will be the soundtracks of a group of ten recent films, of every genre. The outcome achieved upon completion of analysis of the soundtrack music enables to state that no-tonal music is used in narration settings as mystery, suspense/danger, alienation. In all cases where other moods can be envisaged by the theme/narration, tonal/modal music was exclusively used; depending on the settings, the genre can range from any issue of current musical experience, drawing patterns anywhere both in synchronic and diachronic lines.

It is important to notice that, in any case, there are no movies where only no-tonal music is used; whereas the opposite is frequent. In addition, we commonly listen to sounds which are typical of vanguard music of the second part of the twentieth century (produced both with classical instruments and electronically), inserted in tonal settings.

The fact that only tonal/modal music soundtracks are re-used (for example in TV commercials) confirms that this kind of music maintain its autonomy and therefore its autonomous ability to evoke significances; other types of sound arrangements are "included" only in presence of video images. Film narration conveys sense to no-tonal music or, more precisely, contributes to make the non sense of no-tonal music "lawful" in a communicative setting.

*The Partimento in Portugal in the eighteenth century*

The Italianization or "Neapolization" of Portuguese musical life was a continuous process during the eighteenth century, not just in the musical repertory but also in the music education system. From the second decade until the end of the eighteenth century, many important Italian composers, such as Domenico Scarlatti, Giovanni Giorgi and David Perez came to Portugal to assume leading positions as composers and music teachers. Many Portuguese musicians received royal grants which enabled them to enrol at the Conservatorio Sant'Onofrio in Naples. One of the consequences of the musical Italianization in Portugal during the eighteenth century was the introduction of the Neapolitan *partimento* as a very important part of a solid musician's training. We find in The Portuguese National Library, not just original Neapolitan *partimenti* composed by Leonardo Leo, Carlo Cotumacci, David Perez etc., but also an autochthony production. The first Portuguese method of *partimento* is the *Regras de Romão Mazza, P'a Acompanhar to Cravo* (ca.1740). Romão Mazza (1719-47) was one of the first Portuguese musicians to study in Naples. In this method, after the explanation of the rules of keyboard accompaniment there follows 120 exercises using the rule of the octave in 30 tonalities – the 24 usual keys and 6 enharmonic ones – after which follow 8 *partimenti* of a more advanced level. Five of these *partimenti* are of considerable dimensions (between 80 and 120 bars). In the method, Mazza adds a section above the accompaniment of the recitative, plus an appendix of eight easy lessons of *partimento*. The second Portuguese method of *partimento* – *Solfejos de acompanhar 1<sup>a</sup> and 2<sup>a</sup> Part /feitos por Joze Joaquim dos Santos* (c.1770) – was composed by José Joaquim dos Santos (1747-1801), a disciple of Perez and a music teacher at the Patriarchal Seminary in Lisbon. He divided his method in two parts: the first part contains 65 *partimenti* of easy and intermediary level in Bass clef while the second part has 40 *partimenti* of an advanced level and in different clefs. The *partimenti* by Santos are presented in a progressive way and cover all tonalities and different musical forms, such as *ciaccona, passacaglia, toccata, fugue*, etc. The other Portuguese method of *partimenti* – *Lições para Acompanhar do Snr João de Souza de Carvº*, (ca 1770) – was composed by João de Sousa Carvalho (1745-98). Carvalho studied at the Conservatorio Sant'Onofrio a Porta Capuana (Naples) under the guidance of Cotumacci. The 19 *partimenti* of Carvalho are now thought to be for musicians, not beginners, as it ignores the rules of accompaniment. In some *partimenti*, Carvalho furnishes the realization of the right hand. The peculiarity of Carvalho's solutions is found in their duration (up to 8 bars). The *partimenti* are always written using musical forms. The harmonic vocabulary used in these Portuguese *partimenti* methods is the same as those of the Neapolitan school of the same epoch. The didactical organization, except in the case of Sousa Carvalho, is the same as found in the works by the Neapolitan teachers as Cotumacci or Fenaroli. The Royal music schools of the Lisbon Patriarcal Seminary and the colégio dos Santos Reis in Vila Viçosa were created using the model of the Neapolitan Conservatory. And like in the Neapolitan matrix, the study of the *partimento* was *conditio sine qua non* in the process of formation of the musicians in those Portuguese schools.

**COSTAS TSOUGRAS** (Aristotle University of Thessaloniki, Greece)

*Chromatic third relations, symmetrical octave division and paths in pitch space: theoretical and analytical study of the harmonic structure of Franz Liszt's Il Penseroso*

Chromatic third relations and symmetrical octave division into three or four equal parts consisting of major or minor thirds, as well as symmetrically constructed chords, were important structural elements of the music written in the second half of the nineteenth century. Theoretical research on these issues has been active since the end of the nineteenth century (mainly in the Riemannian functional harmonic theory tradition, see Riemann 1893, De la Motte 1976) but it has recently been invigorated by newer theories of harmonic structure and/or formal function [Imig 1970; Lewin 1987; Cohn 1996, 1998; Hyer 1995; Lerdahl 2001]. Particularly interesting is Lerdahl's Tonal Pitch Space (TPS) theory in regard to symmetrical pitch spaces. The pitch space distances that the model yields for the chords and regions of octatonic and hexatonic spaces is unexpectedly small, a fact that indicates the real structural affinity between regions that are one minor or major third apart, when they are perceived and studied outside the strictly tonal harmonic framework. The significance of symmetrical harmonic structures in Liszt's mature works has also been explored in theoretical/analytical research by Cinnamon [1986], Forte [1987], Todd [1988], Skoumal [1994], etc. These papers examine the works' deeper harmonic structures and identify the importance of chromatic thirds relations and the weakening of the dominant-to-tonic diatonic fifth relations, while they project their conclusions mainly through Schenkerian reductional diagrams or chord charts and references to dualistic harmonic theories of the nineteenth century.

The present paper attempts the application of a combination of older and recent theories and analytical methodologies (focusing on Riemannian functional harmony, reductional theory, neo-Riemannian transformational theory and Tonal Pitch Space theory) to the analysis of Franz Liszt's solo piano piece *Il Penseroso* from the collection *Années de pèlerinage. Deuxième Année: Italie*. The analysis reveals that chromatic thirds and symmetrical harmony are core elements in the piece's harmonic language, influencing both the surface linear chord progressions and the background tonal region relationships, as well as the work's overall structural and morphological design. The piece's deeper harmonic structure denotes the use of the hyper-hexatonic system, in reference to which the paths in tonal space are drawn schematically and calculated mathematically according to the TPS theory. The explanation of the piece's harmonic structure renders a complete functional, morphological and reductional-Schenkerian analysis of the work and also provides a base for possible hermeneutic approaches to the work's title and programmatic-poetic stimulus.

**EDWARD VENN** (Lancaster University, Great Britain)

*Musical gesture and dramatic trajectories: the case of Michael Tippett's The Knot Garden*

In his third opera *The Knot Garden* (1966-69), the English composer Michael Tippett (1905-98) combined a dense network of musical, psychological and literary allusions with a highly chromatic and gestural musical language. The libretto disseminates aspects of Shakespeare's *The Tempest* through a narrative that ostensibly focuses on a psychotherapist's attempt to help a family beset with internal crises. This blend of tradition with modernity is reflected too in the musical structure, which retains something of a normative three-act operatic format, but incorporates musical "dissolves" that are indebted to the fast cutting of television drama. Such devices demonstrate Tippett's ongoing concern with the renewal of archetypal plots and forms whilst pointing towards new operatic possibilities.

Tippett's music of this period – described by his biographer Ian Kemp as "expressionist" – developed in response to the musico-dramatic requirements he set himself. His gestural language, first explored in his second opera *King Priam* (1958-61), became further attenuated in *The Knot Garden* under pressure, perhaps, from the extreme psychological states of the opera's protagonists. This paper seeks to explore the relationship between gesture and dramatic content within *The Knot Garden*. In doing so, it derives methodological tools from recent scholarship on musical gesture [Hatten 2004; Cumming 2000; Lidov 2005], reworking them to account for non-tonal context in which Tippett's gestures occur.

In doing so, I demonstrate that Tippett's gestural musical language responds to the dramatic situations in two principle ways. Firstly, the fragmented nature of the musical surface reflects the fractured identities of the protagonists. Secondly, despite this apparently "modular" surface, the gestures possess agglutinative properties that have the capacity to shape expressively dramatic situations over both short and longer spans of music.

*Franz Liszt's music in the movies*

This paper will focus on the relevant aspects of Franz Liszt's music featured in films, with the objective to highlight common elements and connections which each composition establishes in association to particular images, among films altogether different in character.

Between 1930 and 2010, there are about three hundred films which use the music of Franz Liszt. All of these examples give us a very interesting, clear picture of the musical figure and work of Franz Liszt – one of the most “robbed” classical composers in the world of cinema. In order to deal with the large number of available documentation on this subject matter, the films in consideration have been grouped in three sections:

- 1) films where Liszt's music deeply characterizes the narration, by permeating the soundtracks and marking the plot developments;
- 2) films where Liszt's music has a principal role, perhaps important in specific areas;
- 3) films where Liszt's music appears occasionally, as part of the soundtrack which includes other musical sources.

The analysis will be focused on Lisztian themes, which appear more frequently as leitmotifs for varying characters and situations. The *Hungarian Rhapsody* n. 2 is definitely the most borrowed work, given also its many appearances in cartoons. There are roughly about one hundred twenty instances of this composition between films and short film productions (of which no less than thirty may be accounted in cartoons alone). The finale section of the *Rhapsody* is generally connected to happy situations, if not comical or grotesque happenings. The theme from *Dream of Love* n. 3 appears in about sixty films, almost always involving an actor-pianist, tied to romantic circumstances, expressing longing for love or during a wedding etc., as was often used in the early history of cinema. Fragments from *Les Préludes* appear in about thirty films. The war-like theme of the *Prélude*'s finale is used as a *Leitmotiv* in science-fiction series or as a background in heroic scenes. Other much used Lisztian works include the Piano Concerto n. 1, *Consolation* n. 3, *Un Sospiro*, *The Hungarian Fantasy*, *Mephisto Waltz* n. 1 and *La Campanella*. In addition to these aspects, it is worthwhile pointing out that there are about ten films which deal with Franz Liszt's life, one of the most represented composers in cinema, which confirm his enormous popularity among audiences. We may add yet another thirty titles in which Liszt appears as a minor character, or where he serves as a “stooge” in films about other composers.

*Macro-structural functions of harmony-timbre and texture: some analytical observations on Ligeti's and Maderna's compositions in the 1960s*

During the 1960s Maderna began to compose with timbres and “complex sound” understood as structural functions. His intense activity in conducting and composing becomes a fertile ground for timbre-harmonic and formal experimentation conjugated with the virtuosity of its aleatory technique and with the complexity of the “group composition”. Maderna was also engaged in research at the Electroacoustic Studio di Fonologia in Milan since the 1950s, where he worked with the elaboration of the timbre of acoustic and electronic origin. This research influenced the traditional compositional thought, ensuring that the principles and techniques of electronic music would apply also to acoustic composition.

Ligeti is another composer who, at the same time, is interested in the composition of the timbre understood and used with a structural function. He, too, as Maderna, but with different techniques and procedures, is interested in the sound as a complex object, produced by additive synthesis of pitches, rhythms and textures, assigned to different instrumental timbres. With Maderna the structural use of the timbre generates a morphologically rather static conception of the work, essentially structured by panels. With Ligeti the complex timbre has an unifying function of the elaboration of the global form. In this perspective, the musical form is defined primarily as becoming, a “form-movement” which seeks the architectural balance of the whole.

Both for Maderna and Ligeti this new conception of “complex-timbre” goes hand in hand with a renewal of harmony, since the two parameters are conceived in an organic and interactive way. The two composers are involved with the definition of a new musical writing that can be called “harmony-timbre”. That is, the construction of macro-objects formed by layering and blending of different instrumental timbres, in which is the resulting overall sound that matters rather than the sum of its individual constituents.

For Maderna the use of aleatory technique does not involve a deconstruction of macroform, but instead it aims to give life to a new conception of form virtually designed, whose implementation is entrusted by the conductor according to specific instructions, in which the formal responsibility is assigned to the “complex timbre”.

This paper will examine some works by Maderna and Ligeti of this period, on the one hand trying to highlight the different conceptions in structuring musical macroform, on the other hand, on a lower level of formal articulation, it will analyse the ways of musical writing used by the two composers for the elaboration of the harmony-timbre.

The study of gradual transformations constitutes one of the main approaches for the analysis of Ligeti's music, principally in the works where he makes extensive use of clusters. This kind of transformation is not exclusively observed in the pitches but also in other aspects of the compositions as timbre, harmony or density. This method is used by Ligeti to represent emotions or impressions and to produce acoustic illusion. In this sense, we can find gradual transformations in very different textures. Considering only some cases, we take into account two classes of works: 1) those with "static" texture, composed by sustained tones, as *Atmosphères* (1961), *Lux aeterna* (1966) and *Lontano* (1967) and 2) those structured from repetitive patterns, as *Continuum* (1968) and *Monument* (1976) – first piece of the work for two pianos *Monument, Selbstporträt, Bewegung*.

In *Atmosphères*, the transformation of sound colour takes place from the interaction between the innumerable micro-discontinuities and the enormous quantity of voices that forms the continuous sound mass. In *Lux aeterna*, the constant modifications of intervals are part of a clearer and more consonant harmony than in *Atmosphères*. In *Lontano*, the harmonic transformations and the use of crescendos in different layers give the impression of distance or proximity.

In *Continuum* there is only one procedure of gradual transformation of the initial pattern that generates the impression of a continuous variation of density. In *Monument*, the creation of various layers of sound from different dynamics generates the illusion of several simultaneous musical evolutions and of a static music.

All these works, as others not mentioned here, reveal an intense use of the technique of minimal transformations. In general terms, each one develops the idea of a slow and continuous metamorphosis where illusion is always present. The impression of continuity caused by the constant flow of events almost prevents us from perceiving the minimal transformations that take place in the interior of this process. As slower is the change and more intermediate steps are in the transition from one state to another, more effective is the result of the gradual process. Repetition and delay in the introduction of novelty mask the limits between objects and states. There is no transition between different objects; there is only transition, a permanent transition.

Poulenc's self-proclaimed "grand opéra" *Les Dialogues des Carmélites* is a calculated anachronism. A twentieth-century resurrection of a nineteenth-century genre, purportedly French in character but premiered in Italian at La Scala, *Dialogues* resists easy categorisation. As if to highlight this heterogeneity, Poulenc dedicated the work to Musorgsky, Monteverdi, Debussy and Verdi, anchoring it in a significant and unusual musical lineage that stretched from the symbolic "birth of opera" to *Pelléas et Mélisande* and, by implication, to Poulenc himself as the inheritor of this tradition.

The opera's subject matter has a complex provenance: based on an actual historical incident that took place during the French Revolution, in which sixteen Carmelite nuns were guillotined, the events were fictionalised in a 1931 novella by Gertrud von le Fort before being adapted into a play by Georges Bernanos. It was this play (with significant alterations) that Poulenc took as his libretto. Contemporary reception of the opera framed it as "a great French victory", words which take on a complex resonance in the context of post-Vichy France. Historian Robert Paxton has characterised this period in terms of repression and guilt – even obsession – and Bernanos's play has been read by some scholars as an allegory of the post-war era, in which France, beleaguered but ultimately triumphant, is represented by the martyred nuns. Yet Poulenc's opera, by contrast, is generally assumed to be profoundly apolitical – it is frequently interpreted as a product of the composer's troubled personal life or his turbulent relationship with Catholicism.

My paper considers the implications of a political reading of *Dialogues*, exploring the ways in which Poulenc's antipathy towards the music of the Darmstadt avant-garde was intertwined with contemporary notions of French nationalism, and how both of these factors are manifested in the opera. It examines the musical and dramaturgical references to grand opera, and the manipulation of aural space through the construction of two violently opposed groups (*la foule* and *la communauté*). Both are framed in terms of the composer's broader project, which I argue constituted a re-imagining of musical and political history: Poulenc sought to create an opera that would be both national and universal, both historical and contemporary, that would speak to all humanity but also specifically to French audiences of the post-war period.

Adolph Bernhard Marx is perhaps best known for the compendium of formal types which occupies the major part of Vol. III of his composition treatise, *Die Lehre von der musikalischen Komposition*. Beginning with a simple musical period, Marx charts a progression of increasing formal complexity that culminates in sonata form. Since Marx's treatise grew out of his lectures as a Professor at the University of Berlin and his teaching at a Berlin Conservatory, it has explicitly pedagogical aims. At the same time, Marx's text implies that much more was at stake than musical proficiency; his discussions of form frequently bring up the way in which form ideally embodies both freedom and rationality, and towards the end of his gamut of forms, Marx even states that his theory of musical form eventually sets the student free.

My paper sheds light on the seeming extravagance of Marx's claims by examining further contexts for his thought. Marx's invocation of such broad philosophical concepts as freedom or reason is itself unusual among theorists, and his very notion of form is a complex negotiation between the requirements of a regulative formal type and the composer's freedom of expression. His theories of form have frequently been criticized for their apparent lack of analytical rigor, and his discussion of sonata form is famously problematic since he cites no complete movements that actually exemplify the form. I argue that this exceptionality is pursued systematically by Marx and constitutes an element indispensable to his view of musical form. Far from providing a taxonomy of forms, Marx in fact understands form as a synthesis of musical energy and construction, motion and constraint, feeling and logic. Marx's ideas display striking resemblances with Schiller's *On the Aesthetic Education of Man in a Series of Letters*, in which Schiller argues that the Aesthetic, in various guises, is the means by which we can synthesize the opposing binaries of feeling and reason, matter and form, appearance and abstraction, experience and thought. It is through this synthesis that we become free and truly human.

In light of the resonances I trace between Schiller's category of the Aesthetic and Marx's concept of musical form, the emphasis of Marx's treatise can be seen to turn away from the simple teaching of musical skills in favour of a far more ambitious project in which a person strives towards fulfilling their human potential through art. Once seen in the context of parallel ideas in Schiller's text, the central concerns and priorities of Marx's pedagogy begin to take shape as part of a historical texture that includes not only a sense of education with much higher aspirations, but a sense of music itself as intimately connected to vital matters of art, humanity and civilization.

Responding to a common feature in atonal music – the lack of consistent sound organization – Charles Seeger pioneered a pre-compositional method, called *dissonant counterpoint* (1913). In Seeger's method, all consonances must be prepared and resolved by dissonances. Meanwhile, to distinguish the quality of each interval, Seeger categorizes all intervals into consonances or dissonances. However, within this categorization, similar to other recent scholars (such as Ernst Krenek and Joseph Straus), he questions the quality of the tritone and intentionally leaves this particular interval undefined. Problematically, if the tritone is defined as neither a consonance nor a dissonance, its use in a chord will also affect the quality of the corresponding harmony, making it essentially indeterminate as well.

It is puzzling that if Seeger's dissonant counterpoint carries such an inherent problem, how would composers put this problematic pre-compositional theory into practice? Do their derived compositions project a similar image, preserving this problem and presenting a succession of chords with ambiguous harmonic qualities? Or, perhaps, in these compositions, may we find an alternative solution, which can be further adopted to solve the problem as described above? Using a dissonant contrapuntal composition as a case study – Ruth Crawford's String Quartet (1931) – my analysis, in fact, shows that it is difficult to consistently describe the harmonic qualities of all the chords that are used.

Testing the limits of Seeger's method and also seeking ways to consistently describe the chords in Crawford's composition, I develop a harmonic measurement that further refines Seeger's method. Since neither consonance nor dissonance can describe the quality of the tritone, my measurement, instead, takes into account an alternative perspective of all intervals – their space – and uses it to create a simple arithmetic formula that calculates the “degree of compactness” of a chord. Significantly, with the aid of this newly derived harmonic measurement, I found a relevant and underlying harmonic progression in Crawford's string quartet, one that, I believe, solves the problem inherent in Seeger's dissonant counterpoint, as well as explains Crawford's practical application of this method.

Existing readings of the final published version of "*Dante Sonata*" [Walker 1970, 1971; Pesce 1994, 2004; Arnold 2002] differ remarkably in the division of formal sections and functions. These discrepancies reflect different analytic biases, ranging from formal divisions that rely on melodic/thematic recurrences, harmonic manipulations, to reading that captures thematic connections. This paper aims at devising a sonata reading that takes compositional context into account. One of the focal issues in establishing the compositional context is to identify the sources of compositional inspiration. While Liszt scholars generally regard the primary source of inspiration of "*Dante Sonata*" as Liszt's reading of Dante's *Divina Commedia* in the late 1830s, split accounts exist concerning the role of Hugo's poem that contributes to the final published title of the work, *Après une lecture de Dante*. While Searle [1954] and Watson [2000] recognize the relevance of Hugo's poem without exemplifying the connection, Walker [1983] and Hamilton [1996] disregard altogether the tie. Trippett [2008] articulates the evolution of the multiple versions of the "work", and connects to Liszt's changing identity from an improviser to a composer, yet he does not explain the role of Hugo's poem toward the final publication.

More than providing my own sonata reading that complements and/or contrasts with that of the existing ones, I illustrate how music semiotic concepts of markedness [defined by Hatten 1994] and contextual motivation (a concept that encompasses Monelle's [2000] cultural indexicality of icons and Hatten's concept of motivation [1994]) reinforce my account of formal sections. This paper investigates iconicity of rhythmic gestures, the derivation of musical meaning for intervals, the indexicality of "feelings", and the parallelism between formal proportions in Hugo's poem and those in Liszt's piece.

Parallels exist between the musical narrative and Hugo's poem. Hugo begins to mention life in hell, and Liszt does the same. Liszt captures the spiral imagery in Hugo's verse through analogy to harmony and melody. Liszt uses disoriented harmonies to depict getting lost in the fog. Liszt's love scene shows up at approximately two-thirds of the way through the piece, which corresponds to its location in the poem. The formal overlapping of the retransition and the recapitulation of the primary theme are deliberate formal distortions that depict the grimace in Hugo's verse. Also, the lowest note of the piece lies 1/5 from the end of the piece, just as Hugo mentions the bottom of the pit at 1/5 from the end of the poem. My semiotic interpretative account does not only support the devising of formal functions in a sonata reading, it also justifies that Hugo's poem, *Après une lecture du Dante*, was an important source of inspiration toward the final published version of Liszt's "*Dante Sonata*".

This paper is based on the results of the ten-year collaboration between a psychoanalyst and a music theorist/composer. It starts from the assumption – about which there is little doubt – that most people respond to music with powerful affects, and that this has probably been so from the dawn of mankind. The crucial question – how music achieves this – still remains unanswered. The present paper offers an approach that combines psychoanalysis and music theory with the aim of shedding more light on that question.

We will begin by considering the general psychoanalytic theory of affects in order to demonstrate that musical structures and processes correspond to the structures and processes pertaining to the earliest and most archaic stages of human mind. In these archaic stages of human mental development, the powerful bodily-close affects are associated with the most primitive forms of perception and experiences (particularly auditory ones). According to psychoanalytic theory, these primitive forms are dominated by various transformational processes such as inversions, multiplications, reversals or turning original percepts into their opposites.

Precisely these processes will be sought as we examine various musical structures and procedures. In particular, our attention will be devoted to: a) thematic procedures, i.e. various ways in which thematic material in music is developed and transformed; b) harmonic progressions and their affective consequences; c) large-scale formal processes leading to normative formal types such as sonata, rondo etc.; d) elaborations of fundamental structures, whether Schenkerian, neo-Schenkerian, set-theoretical etc. All these aspects of musical structure will reveal isomorphism with archaic mental structures, and consequently, the ability of music to bring about affective arousal in the listener.

The aforementioned considerations will be crucial in determining the important psychological role music performs. Namely, following the acquisition of language in the earliest childhood, the world that was previously non-verbally experienced is now verbalized. From the point of view of cognition, this is a great advancement in mental development, yet from the point of view of discharging affects, it is a loss. It is precisely those preverbal affects – once experienced and subsequently repressed (but constantly seeking the discharge) – that are capable of being evoked when presented with organized auditory tensions and releases (which are by their nature isomorphous with the earliest stages of mental perception). In this way, the initially established archaic unity is re-created again, and the powerful affect is set in motion, to be finally discharged. The importance of releasing those primitive affects for the well-being of psyche and maintaining the psychical equilibrium will be discussed in the concluding portion of the paper.

*Hearing harmonies - Ear training with the "Navigation-voice"*

This is a method which is very easy to learn for students on high schools and on universities. There are two presuppositions for practicing ear training with regard to harmonies:

- 1) The singing voice. Whenever a student hears music, he will also sing simultaneously. This means that he will always hear two voices: the melody (with or without chords) played by the piano or the CD and his own voice. When hearing these two voices he will either experience a feeling of harmony and calmness – a consonance – or a tension between the two voices – a dissonance.
- 2) The "Navigation voice". The next question is: Which voice should be sung? At first the student sings the tonic keynote = do. Usually this is the last note of a song or a piece. As long as the student can sing the tonic keynote (as a consonance in relation to the second voice), the harmony is always the tonic. Whenever the tonic keynote does not fit, the navigation voice changes from do to the nearest note, the leading note.

At the first level, music has only two – and later three – harmonies: T, D, and S. Which kind of music is suitable for these lessons? At the beginning you can play or sing folksongs and dances. Later the students should be able to hear the harmonies in themes of sonatas by Schubert, Beethoven, Mozart, Strauss etc.

To reach a higher level you can play music with nonharmonic notes such as suspensions, anticipations, pedaltons or with modulations. The "Navigation-voice" is no longer restricted to the tonic keynote and the leading-note, it can also move upwards or downwards by one or two halfsteps.

Ear training with "Navigation-voice" can be done at the moment when you hear real music and not chord by chord or note by note so that you can hear from bar to bar. And this training can be done wherever you are and without notating anything.

*The mobility of structures in the works of Franz Liszt. From the romantic form-process to "open" form*

A mong Franz Liszt's most impressive musical discoveries is his novel, more free treatment of time in music and a new sensation of form in time. While developing the principles of his predecessors among the Romantics (especially those of Chopin), Liszt in his Symphonic Poems and many other compositions perceives form not so much as a structure, but rather as a process of development, aimed at a dramaturgical outcome which signifies a qualitatively new condition of the primary thematic material. This kind of process is characterized by directedness and final completeness, and so belongs to the conception of classical and romantic forms. In addition to this, many of Liszt's compositions possess another type of procedural trait that causes such a substantial quality as the directedness towards the dramaturgical outcome to be leveled. In such cases it is possible to speak of "movable structures" the extent and scale of which could be varied.

We examine the examples of mobility of the structures on different composition levels.

One of the most expressive examples of tonal alteration within a theme is in *Vallée d'Obermann* from *Années de pèlerinage* (within the framework of a period a modulation takes place: E minor – G minor – B♭ minor), which contradicts the expositional nature of the theme. Examples in which tonal instability is complemented by other indications of a developing (non-expositional) statement of the theme are very diverse in their significance in the context of the composition's "dramaturgy" (The First Concerto for Piano and Orchestra, the Sonata in B minor, the Symphonic Poem *Hunnenschlach*, etc.). The mobility (or instability) of the structure at the level of the entire composition has a large number of expressive and diverse examples among Liszt's late compositions.

However the dialectics of the self-contained and the open form is also present in the earlier compositions: the symphonic poems *Ce qu'on entend sur la montagne*, *Die Ideale*, *Tasso*, etc. and especially in the Sonata in B minor.

An analysis of the tonal harmonic structures of the Sonata can reveal the problematic trait of asserting the main tonality in the most important, crucial moments: at the beginning and the end of the composition, as well as the ambiguity (mobility) of the compositional functions of its respective sections and the relative openness of the entire composition. The "circular" vector of the form (different from that in most of Liszt's large-scale compositions) is diluted, and the end of the Sonata acquires the traits of a "retransition" – but the "retransition" to Eternity.

**M**arguerite and Armand by Frederick Ashton is a choreography performed for the first time in London in 1963; it is made on Liszt' Sonata in B minor and it is inspired by A. Dumas' novel *La Dame aux camélias*. Even though the Sonata is a Lisztian pure music piece, through *Marguerite and Armand* it succeeds in being involved in a semiosis. With its gestural and evocative qualities, the score of the Sonata proves to be adaptable to the expression of a something: its dynamic writing contains the plot as a poetic language, and the dance is its interpretant. *Marguerite and Armand's* choreography is based on a deep motivation, and it's made in a relationship of correspondence with the music. In this way the choreutic movement acts as a vehicle for the understanding of the music. The dance gives evidence to the typical formal, rhythmic, timbric, harmonic, phraseological, dynamical and textural aspects of music; the dance becomes the Sonata's kinetic visualization, illustration in the form of translation, connotation in emotive association, amplification of the sensorial stimulus field, equivalent sign, spatial-temporal kinetic vectorialization.

On a macro-structural level: *Marguerite and Armand's* choreography is a fantasy on the deathbed in which, with a series of hallucinatory flash backs, Marguerite revives her love story with Armand. The romantic ingredients of Dumas' play are condensed in poetic evocation. In arranging the narrative material, the choreographer avoids linearity, the classic ballet's canonical three-partition and the articulation in more acts, just like the Sonata eludes the three-parted and bitematic canonical form and the articulation in more movements, structuring itself in cyclic form. The changes and the passages in the choreography correspond to the changes of the agogic, of the tonalities and of the metres that indicates the borders of the musical sections. On the vector of the intensification and of the complication of the plot, the choreography is taken to its extreme point that coincides with the Sonata's climax, to decline, then, into the epilogue.

On a micro-structural level, let us consider only a few examples such as the exposition of the second theme: the emerging of the torment that breaks the immobility of the first theme is visualized by two movements of the trunk and of Marguerite's arms in correspondence of the leap of octave from the grave to the acute, repeated twice. Or that of the exposition of the fourth theme: the entrance of Armand is triumphal and luminous like the *Grandioso* prescribes; then, to the melodic movement ascending until the **fff** is associated a slow and continuous ascending movement of the open arms, while the chordal repetition and the passage from **ff** to **fff** accompany the increasing of the dramaturgical tension that is the meeting between the two. So, my study points out the counterpointed and multidisciplinary analysis.

## Abstracts

### Posters and Workshops

**CARLOS AGON, MORENO ANDREATTA** (IRCAM Centre Georges Pompidou, Paris, France)

WORKSHOP: *Some OpenMusic-based computational models in computer-aided music theory and analysis*

In this workshop we present some computational models in computer-aided music theory, analysis and composition by using *OpenMusic* visual programming language. This environment, which was originally conceived for computer-aided composition, can also be very useful in computational musicology. After presenting some of the main *OpenMusic* functions that provide some geometrical representations for musical structures and processes (in the pitch – as well as in the rhythm – domain), we will discuss well-known music-theoretical and analytical paradigms, as Pitch Class Set Theory or Transformational Theory by using *OpenMusic* specialized package *MathsTools*.

The *OpenMusic* implementation of these concept leads to a paradigmatic architecture which gives the possibility to approach music analysis with a more firmly established theoretical background. The workshop includes the discussion of some computational models for computer-aided musical analysis based on set-theoretical and transformational theory (focusing on Elliott Carter's *90+* and Karlheinz Stockhausen's *Klavierstück III*) and Xenakis' stochastic, symbolic, sieve-oriented and algebraic approaches (from *Achorrips* to *Herma* and *Nomos Alpha*). We will also show how *OpenMusic* enables to model canonic processes, from Bach (*Canon per tonos*) to Messiaen (*Harawi*) and even more contemporary canonical techniques based on tiling structures (Vuza's canons, augmented canons and Johnson's perfect canons). The intended and expected audience includes any music theorist and analyst interested to computational aspects of music theory and analysis. Some background in computational musicology may help but is not mandatory.

Technological development in the computer industry in recent years has completely changed the scenario of experimental research related to musical systems and performances. It is now possible, by using any personal computer, to carry on sophisticated analysis on audio files which, until a few years ago, only highly specialised research centres with professional equipment could accomplish. Among the most powerful software in this field, *Praat* (by Paul Boersma and David Weenink; website: <http://www.fon.hum.uva.nl/praat/>) has gained during the past decade a leading position and an increasing popularity among researchers in the field of voice analysis, thanks to its powerful analytic tools but also to other relevant circumstances, such as 1) the fact that it is an open source software; 2) the fact that it is cross-platform, leaving the user with the freedom as to the operating system that best fits his/her overall needs; 3) the fact that it has a relatively large community of users and a mailing list which provides newcomers and advanced users with help.

*Praat* is a software for doing phonetic research, but it can be used also in musicological analysis. In this field, it has been used in researches that include, in particular, spectrographic and profile analysis. However, presently many members of the scientific community of musicologists and ethnomusicologists are not aware of the possibilities of analysis that this software provides.

Therefore, the purpose of the workshop are: 1) providing an overview of the main features of *Praat*; 2) showing, by resorting to case studies, some possible applications of *Praat* in musicology and ethnomusicology; 3) offering participants some useful scripts to perform the described analysis on any audio file.

In particular, the following topics will be covered:

- Introduction to the program and its main features
- Analysis of pitch (extraction of pitch, automatic methods for profile analysis, intervals and scale analysis)
- Ornamentation (analysis of the vibrato)
- Timbre (analysis of timbre through LTAS, application of the algorithm LTAS Pitch-corrected)
- Rhythm (annotation with TextGrids and analysis of rhythm)
- Experiments (construction of sounds, manipulating sounds)

Participants in the workshop can be either listeners and people with their personal computers. The latter – who can replicate on their own laptops some of the analysis shown – are requested to download previously an up-to-date version of the program suiting their operating system from the website <http://www.fon.hum.uva.nl/praat/>. The procedures will be explained with the help of a *PowerPoint* presentation with: 1) text in English; 2) list of the steps used to carry on the analysis; 3) many screenshots of the main steps and/or graphic outcomes of the analysis.

In spite of the increasing demand of musical popularization, music seems to have objective difficulties with the hermeneutics aimed at a non insider public. Besides the need of translating in conventional language events having a special relationship with the meaning, to consciously approach music is necessary to develop powers of concentration essential to the reception of the contents of the musical popularization.

Among the main facilities that multimedia tools can provide to musical popularization are:

- Easily understandable explanation of the structural characteristics of an opera, replacing the usual methods based on the score examination, a code quite unreadable for the most part of people involved in musical popularization.
- Creation of real time optical events “isomorphic” to the aural events that occur during the playback of a musical piece. This relationship allows concentrating our dominant sense of sight towards objects correlated with the ones that are investing the hearing, increasing the powers of concentration necessary to reach a “conscious listening”.

The workshop will introduce three software tools that I use in my conferences and seminars.

The first one is based on an animation tool used to make a graphic and interactive representation of a musical piece. The graphic version is built by means of coloured plugs, displayed while the piece is played. The shape and the colour of the plugs are chosen to highlight the degree of similarity of the corresponding musical phrases. In navigation mode the user can replay each musical phrase by clicking with the mouse on the corresponding plug.

The second tool is based on the insertion of “bookmarks” inside audio file in WAV format by a common commercial sound editor. A software program reads these data and allows starting to play the piece from any bookmark. Bookmarks are organized hierarchically, in order to define nested sections inside the piece. The software provides a graphical representation of the music, supporting the diachronic perception of musical forms, and allows the user to play a whole section or a single subsection.

The last program is designed to real time display of polyphonic music. The program processes MIDI file, intercepts and decodes MIDI commands and develops a graphical representation of the melodic lines synchronized with the music playing. The melody is sketched by means of broken lines made of horizontal segments set at different heights according to the pitch of each note. The length of each segment is proportional to the duration of the corresponding note. A toolbox allows modifying the volume of each track and regulating the playback speed. At the end of the playback it is possible to analyse the sketch to observe the characteristics and the development of the melodic lines and detect the relationships among the voices (imitative passages, *fugato* and canonical cues etc.).

This workshop will demonstrate the software that forms an integral part of the three analyses completed to date that use an interactive aural approach: analyses of Jonathan Harvey's *Mortuos Plango, Vivos Voco*; Denis Smalley's *Wind Chimes*; and Pierre Boulez's *Anthèmes 2*. It will explore the principles behind these analyses and will discuss the wider implications of such an analytical approach.

Interactive Aural Analysis (IAA) aims address problems particularly associated with the analysis of electroacoustic works, music that is often only partly notated, if at all. Transcription of such works is also frequently problematic and the music may not be defined easily in terms of traditional "note events". The notion of the "sound object" and the segmentation of such works can prove problematic. Subtle changes in the internal timbral evolution of sounds, their "spectromorphology", may play a crucial role in the musical structure and extended passages may be the result of continuous textural transformations not easily broken down into separate events. Significant structural features may occur at a level below that of the note – in terms, for example, of individual components of the spectrum. Fusion and fission of sound elements (whether temporal or timbral) may make it difficult to identify a stable fundamental building block for such music, further complicating visual representation. In using software as a significant part of the analysis, alongside written text and diagrams, IAA seeks to engage the reader directly with the sound, for example creating various kinds of analytical charts in sound.

Since the compositional/technical means used to create and shape such works are not familiar to many, and often these are central to the way the music is structured, the software is also used to introduce readers to these techniques and their musical deployment through a series of technical exercises. These exercises are interactive, allowing readers to explore the potential of the techniques and learn more about the significance of the way in which they are used in the particular work. It is, for example, possible to discover how a range of different sounds is related through successive processing of a single source sound. In relation to the analysis of *Wind Chimes* an interactive aural sonogram was also developed to enable readers to put the work under an aural "microscope".

The software is designed to be accessible to those who are not specialists in music technology. Each of the three works analysed to date have been chosen to develop the analytical approach in different directions related to the different styles and genres of the works (*Mortuos Plango* - spectral; *Wind Chimes* – acousmatic; *Anthèmes 2* - live processing). The method of creating such software and the broader potential for employing this approach in studying acoustic music will be explored.

*Theme:* hybridity and complementary structure

*Approach:* Analysis and comparative study; creating models for theory education

Ever since polystylistic elements started to be applied regularly in compositions of the later twentieth century, this has proved to be a serious challenge for the further development of writing skills and systematic analysis in contemporary music. Since the 1980s tone systems in compositions have regularly integrated forms of tonality. As a result the number and variety of possible applications has grown explosively. What are the consequences for theory education at Academies of Music, considering the fact that composing has developed into a very hybrid activity? The demand for a clear structure in methods of analysis, for the benefit of both performance practice and compositional applications, is a logical consequence of the infinite abundance available within contemporary music.

The workshop is centred on an analysis of two compositions by Magnus Lindberg: the quite recently written Concerto for Clarinet and Concerto for Violin. The applied method of analysis is aimed primarily at the way tonality and atonality are interwoven. In order to fathom the individuality of this hybrid harmonic structure, the composition is also compared to a few variants: excerpts from the work of other composers and Lindberg's own work (including *Arbor Cosmica* by Andrzej Panufnik). A comparative study based on this method reveals relatively independent layers which can function both in a horizontal and a vertical juxtaposition and as such create a harmonic balance. On a syntactic level, this way of composing implies the anachronistic confrontation or interweaving of old and new modes, or series, whereas they have their roots in a stylistic contrast of tonal or atonal domains. However, the starting point of this approach is that a mutual reflection of these particular intertwining pitch sequences can form complementary elements in the overall structure of a composition.

Newer forms regularly show a tendency to detach certain clearly recognizable fundamental principles or conventions, previously inextricably linked with a particular traditional style (both tonal and atonal), and confront or mix them with each other. The mutual reflection or confrontation of these "standard" or "recognizable" applications creates a new context in which seemingly old styles are revived once more. Typical for this method is the creation of layering. When selecting excerpts which illustrate the method of analysis, the following phenomena are of vital importance. Firstly, providing insight into juxtaposition as an application of two mutually opposing force fields. Then, as a frequently accompanying phenomenon, designing multi-interpretable material. The balancing effect of these opposing forces is enhanced by the creation of an open or undefined environment in which flexible material can assume varying manifestations.

The workshop consists of two parts and is in fact an illustration of an approach which can be applied in education ("Models&Skills"). After a general descriptive part, the second "applied" part contains fragmented analyses of some passages and selective (transparent) models for composition.

WORKSHOP: Réminiscences de Don Juan by Liszt: dramatic re-write and communication strategies. Piano performance and analytical discussion

Liszt's *Réminiscences de Don Juan* is a manifold piece, which suggests a sophisticated, hermeneutic approach. The workshop will offer an in-depth analysis of Liszt's expressive strategies, supported by a live piano performance. The main topics to be discussed will be:

- 1) Liszt's multiform theatrical approach to the piano. The author builds fictitious stages and scenes that are situated at different levels, namely memory (*Mozart's Don Giovanni*), imagination (new and unexpected musical situations that don't follow Mozart's pattern), and physicality (the real body of the pianist, performing music before the public). The music keeps on oscillating between these levels with amazing naturalness.
- 2) The shifting of the mood: Da Ponte's witty lightness moves towards a rather tragic but spectacular conception.
- 3) "Cutting" (to use the language of movie making) as a central device: succession and assemblage of sections and episodes take on an extremely important role, both in form and expression.
- 4) The dynamic relationship between exteriority and interiority as a key point: the piece is permeated by the tension between theatrical exteriorization and inner feeling, between gesture and emotion.
- 5) The new meaning of *Don Giovanni*'s demonic element, which in Liszt's hands becomes (instead of the dark side of a single character) a general poetic tendency to excess, affecting several features of the piece: length, difficulty, sound intensity, expressive contrasts.

The above will be discussed with participants; according to the spirit of the workshop, the focus is less on results than on reasoning: the aim of the conductor is to share this reasoning with participants, and, faced with convincing objections, to change it.

POSTER: Interpretative choices and analysis in young pianists' performances

The present research belongs to the performance studies field. This research field has developed since last century, in particular thanks to the new spread of sound reproduction systems, and has been supported by the contributions of several disciplines. In this occasion we want to focus on some cognition sides implied by music performances of young musicians, starting from the concept of "performance" itself, according to Clarke's definition, that tells it is a «concrete shape of a musical thought» [Clarke 2002]; that's why the analysis of the score operated by the performers assumes a fundamental importance. If we consider some of the numerous important theories about this topic, we can say that some scholars think the "performance" could be an implicit process, often carried out in relation to previous musical experiences [Meyer 1973]; others think that you need to have a complete analysis, by involving all score parameter's aspects [Berry 1986; Narmour 1988]; others believe that it exists a mediation between these two aspects, as a sort of informed intuition [Rink 2002, 2007]. The specific literature about these aspects of young musicians' performances is quite new, and there is not a clear studies' system about performance analysis, not even related to the interpretative consciousness.

That premised, some questions come out: 1) Which characteristics of a performance can be considered "interpretative choices", that means derived by a previous analysis? 2) Which is the best way to quantify them? 3) How can we investigate the dynamics about explicit and implicit sides laying under interpretative choices? 4) Can we define and find a direct and quantifiable influence of teachers on their students?

The analysed performances are executed by a small group of young pianists, from 10 to 14 years old, and by their own teachers. They play two pieces that present very different technical and expressive features: *Study for the Left Hand*, (in B. Bartók, *For Children*, Vol. I), and *Ester Verlust*, (in R. Schumann, *Album für die Jugend*). Each young performer's teacher supervises his/her student's activity. After the performance all the performers are asked to report on their own thoughts about the most important characteristics of the score, in a short interview. The performances are registered and video-registered. An analysis of the performances, focused on the particular expressive aspects of tempo and durations is carried out with the support of the software *Sonic Visualizer*. Teachers and pupils' performances are compared and analysed also with the support of the interviews and the video-recordings to evaluate gestures and technical features. The results show that there are many links between teachers and pupils' performances; pupils' implicit analysis appears to be influenced by their teachers, but often you can find original and unconditioned strategies of execution and these are sometimes confirmed by the interviews. This research tries to highlight the aspects of expressiveness and interpretation in a didactic context. This field hasn't been much explored yet, but the results encourage us to consider that it can be a useful topic for teaching instruments.

**SIMONETTA SARGENTI** (Conservatorio di Musica "S. Giacomantonio" Cosenza, Italy)

POSTER: *Gesture and sound analysis: virtual instruments and interactive composition*

Every time we play a musical instrument, we translate a musical idea in characteristic movements. Usually in classical music this idea is represented in a score. However musical analysis of a piece is not only bound to the score notation, but also to body gestures involved in the production of sound, and to the characters of the sound itself.

In this project we analyse a classical music piece to find the different elements of a musical event with different kinds of analysis: score structure, body gesture to produce sound, sound spectral characters. We try then to verify the results of the analysis realising an interactive interface simulating a virtual instrument.

In this project we decided to use violin repertoire and an interface simulating the violin, which plays sounds built with the spectral characteristics of the violin sound.

The piece analysed is Paganini's *Capriccio* n. 20 from his op. 1. From the analysis of the *Capriccio* we obtain:

- 1) The formal and harmonic scheme of the piece
- 2) A movement's map of gestures used to produce the sound.

From the spectral analysis we obtain the characteristics of the violin sound which allows us to create a new virtual instrument. We can now define an interface and an algorithm for the violin sound and a formal idea for a new composition.

The poster will present the different kinds of analysis related to the interface definition:

Gesture Analysis	Bow movements map	Interface's definition
Spectral analysis	Partials component map	Algorithm's definition
Formal analysis	Piece's sketch	Piece's re-composition

**ANNE SMITH** (Schola Cantorum Basiliensis, Switzerland)

WORKSHOP: *Sixteenth-century solmization in practice: What use does it have in the twenty-first century?*

The workshop will provide a practical introduction to solmization, the mutation of hexachords, and the differentiation between the inherent qualities of the individual syllables. This differentiation in quality brings with it a shift in one's hearing of the notes and how they relate to one another and thus has an impact in how we understand the music.

Until recently it has been largely overlooked that numerous sixteenth-century authors reported an inherent difference in quality between the solmization syllables. As early as 1274 Elias Salomonis, in discussing the nature of the halftone step between E and F, wrote that E could be sung with *mi* or *la* and was "very masculine and rigid" and that "F has a womanly agreement and the nature of the feminine sex, and on it only *ut* and *fa* may be sung." Bonnie Blackburn and Leofranc Holford-Strevens have shown how this distinction was so much part of the common knowledge that these syllables came to have erotic connotations in the fifteenth and sixteenth centuries. By the sixteenth century this differentiation, particularly in German humanist circles, was expanded to include the other syllables, *ut* and *fa* being perceived as soft or feminine, *re* and *sol* as average, and *mi* and *la* as hard, masculine.

The application of this information in practice has an impact on how lines are heard, as well as how they progress, there being an increase in hardness in ascending through the lower note of a semitone, with a sense of relaxation in the attainment upper note. Thus solmization understood in this manner has the potential of opening up new perspectives in the performance as well as in the understanding of sixteenth-century music.

After a brief overview of the theory regarding hexachords, inherent sound quality and mutation points, this information will be applied in practice. For this purpose we will sing two relatively simple compositions, one in a "hard" key, the other in a "soft" key, first going through the individual voices, before putting them together. The pieces will be chosen so that they demonstrate all of the basic rules of solmization. On the basis of this experience, we will then look at the structural implications on the broader level. Although this workshop is specifically focusing on the sixteenth century, this sort of solmization was still typically being used in Italy in the eighteenth century. Thus the influence of this sort of thinking continued to hold sway for another two centuries. The first instruction in music from the eleventh through the seventeenth centuries – and at times the eighteenth – usually involved solmization with hexachords. Thus it behoves us in the twenty-first century to integrate this basic material into our understanding of this music, as we will come to see it in a new light, perhaps one more similar to the one in which it was perceived at the time.

**MANFRED STAHNKE** (Hochschule für Musik und Theater, Hamburg, Germany)

WORKSHOP: *Ligeti, patterns and destruction of patterns*

Several works of György Ligeti will be analysed during this workshop, especially piano Études and the solo viola Sonata, to find out about basic simple patterns, which Ligeti uses as a starting point for these compositions, and then following these ideas in the final scores.

There will always be surprises looking at how Ligeti really handles his basic ideas. The point of discussion will be, if Ligeti builds these irregularities out of a purely joyful attitude, or out of a sense for "chaos" as enrichment for listening, or maybe if he likes to form "allusions" to tonal music, maybe to his composer friends all over the centuries.

In the course of the workshop, the participants will be encouraged to find this two-fold world of structural thought by themselves. There will be general hints, given by Manfred Stahnke, towards Ligeti's way of thinking, by implementing examples, mainly from the visual arts, to show the bridges Ligeti himself built between different ways of intellectual, mathematical, or artistic utterance.

## Abstracts Plenary session

**PIETER BERGÉ with Felix Diergarten, Markus Neuwirth, Steven Vande****Moortele** (Katholieke Universiteit Leuven, Belgium)*On the future of Formenlehre: a European perspective*

**A**t the 2007 EuroMac in Freiburg, a plenary session was devoted to "*musikalische Formenlehre*". Three eminent American music theorists – William E. Caplin, James Hepokoski, and James Webster – were invited to present their recent theories and/or methods on musical form and formal analysis. Critical reactions from European scholars on that occasion notwithstanding, it is beyond doubt that North-American theories of musical form have become increasingly influential over the last decades. Their reception in European scholarship, however, remains characterized by much, and largely implicit, opposition.

In this presentation, we examine the strengths and weaknesses of recent American *Formenlehre* from a European perspective. Focusing on three main domains of consideration, we will present a series of propositions on the future development of *Formenlehre*.

The first issue we address relates to the restrictions of North-American *Formenlehre* in terms of its core repertoire. In particular, we will deal with the problems of applying theories of form to a repertoire other than the classical Viennese instrumental music (early classical and 19<sup>th</sup> century, as well as vocal music). Furthermore, we will point at shortcomings that result from a certain generic one-sidedness as well as from the lack of geographical and historical differentiation of formal norms.

We then focus on methodological problems such as the advantages and limitations of statistical methods in determining "default levels" within a given corpus, as well as the precarious question of the theoretical hierarchy of musical parameters (especially with respect to the status of harmony).

Finally, we will tackle a series of meta-theoretical issues, including the risks of a-historical theorizing, the pitfall of self-fulfilling prophecies in the pursuit of theoretical consistency, and the problem of implicit value judgments in analytical practice.

**RICHARD PARNCUTT** (Karl-Franzens-Universität Graz, Austria)*The transdisciplinary foundation of (European) music theory*

In the second half of the twentieth century, Europe lost its traditional leadership in music theory to North America as the Yale school generated new insights into tonal music (Schenker) and "atonal" music (pitch-class sets). But music theory is still strong in Britain, and German music theory has been moving away from its traditional practical focus toward a research model on par with ethnomusicology, systematic musicology and historical musicology. Music theory must now accommodate the contrasting epistemologies of these three musicalogical subdisciplines and strive for new synergies. The term "transdisciplinary" implies both interaction between disciplines and resultant changes within disciplines; since no single researcher can credibly claim international expertise in more than one discipline, transdisciplinarity and high international standards can only be achieved if individual music theorists work together with colleagues from other disciplines. The Conferences on Interdisciplinary Musicology and the *Journal of Interdisciplinary Music Studies* promote such personal interactions: contributions generally have at least two authors, the first representing humanities (e.g. music theory, depending on its definition) and the second sciences (natural, social, formal) or vice-versa, and originality must be demonstrated in both content and synergy. Since many North American researchers in music philosophy, sociology, psychology, acoustics, computing, and physiology are working both within and across such disciplines and therefore "systematic musicologists", and since many of them also work together with music theory, there may be no point in trying to compete with North American music theory on this level. A better strategy might be to promote (transdisciplinary) music theory globally. European funding agencies want European focus and relevance, but they often disregard the implications of globalization: today, no academic discipline can benefit from a nationalistic or "continentalist" approach to research funding. EU-funded projects should be led by Europeans, but they should also integrate and financially support the best non-European researchers – especially researchers from developing and emerging countries.

Until very recently, many of the current analytical theories rested on few basic presumptions: the uniqueness, originality and coherence of the work of art under scrutiny. Every musical work was analysed as if it was written by the composer from the scratch, so to say, as a self-contained universe of meanings.

The few recognized instances of obvious intertextuality were regarded as exceptions, as tokens of an anxiety of influence that affected the composer at some turning point in his career.

The “topics” theory has already begun to undermine the “uniqueness” paradigm, cataloguing a shared formulary of semantic figures that circulated among composers and public. But perhaps the greatest challenge to traditional analytical methods comes from different approaches that are being developed, in the recent years, simultaneously in America and Europe. These approaches include Gjerdingen’s galant schemata, partimento schemata, *Satzmodelle*, pattern of cadences, models of invertible counterpoint, and so on.

What has been discovered is a large and growing depository of *formulae* that was in use during the eighteenth century, but affected a large part of nineteenth century music as well. These schemata were, to a hitherto unknown extent, the fundament of every musician’s craft: they were painstakingly taught and learned over generations, and circulated in the music of different authors. In the past, casual identification of the same scheme in the music of different authors led critics to throw discredit to the authors involved, as they were guilty of plagiarism. Today, we recognize schemata as essential components of eighteenth century musical language.

Triads based on stacked fourths are quartal triads but what about those based on stacked thirds? Then there is music full of tones but called “atonal”, modal music with an obvious tonal centre but not part of “tonality”, polyphonic synthesisers that are not used for “polyphony”, “interrupted” cadences that are indubitably final, etc. These are all examples of the conceptual chaos common in conventional music studies. This chaos is a serious issue because it makes nonsense of tonal practices in much of the music we hear on a daily basis. The obduracy of this muddle-headed concepts in institutions of musical learning obstructs the reform of musicology to include the study of musics outside the euroclassical and jazz canons and it is a stumbling block to those of us trying to put the “music” back into “popular music studies”.

I will briefly demonstrate the untenability of the most popular conceptual misnomers in conventional music studies and I will try to focus on some simple solutions to the problem, using as few neologisms as possible. These solutions draw on ideas set out in *Everyday Tonality* [Tagg 2009], to be published in October as *La tonalità di tutti i giorni* [Milano, Il Saggiatore].

# Index of participants

Stefanie Acevedo, 21  
Hans Aerts, 22  
Carlos Agon, 219  
Alfonso Alberti, 23  
Paolo Albiero, 189  
Moreno Andreatta, 219  
Torsten Mario Augenstein, 24  
Mondher Ayari, 25  
  
Nicholas Baragwanath, 26  
Mario Baroni, 27, 85, 117  
Amy Bauer, 28  
Robert Bauer, 29  
Luciane Beduschi, 30  
Maria Grazia Bellia, 31  
Raffaella Benini, 32  
Vincent P. Benitez, 33  
Marie-Hélène Benoit-Otis, 34  
Carlo Benzi, 35  
Nena Beretin, 36  
Pieter Bergé, 165, 230  
Nicole Biamonte, 37  
Carlo Bianchi, 38  
Enrico Bianchi, 39  
Maria Birbili, 40  
Erica Bisesi, 41  
Wendelin Bitzan, 42  
Wolfram Boden, 43  
Anna Maria Bordin, 27  
Bruno Bossis, 44  
Kristof Boucquet, 45  
Juliane Brandes, 46  
Alessandro Bratus, 47  
Paolo Bravi, 48, 141, 220  
Bella Brover-Lubovsky, 49  
Matthew Brown, 50  
Luca Bruno, 51  
David Burn, 52  
Deborah Burton, 53

Giovanni Cappiello, 221  
Angela Carone, 54  
Antonio Caselli, 55  
Roberto Caterina, 117  
Paolo Cecchi, 151  
Caroline Chen, 56  
Wai Ling Cheong, 57  
Jean-Marc Chouvel, 58  
David I. Clarke, 59  
Michael Clarke, 222  
Kevin Clifton, 60  
Robert C. Cook, 61  
Klaas Coulembier, 62  
Luisa Curinga, 63  
  
Duilio D'Alfonso, 64  
John Dack, 65  
Rossana Dalmonte, 66  
Giuliano Danieli, 67  
Daniele Daude, 68  
Andrew Davis, 69  
Innocenzo De Gaudio, 70  
Susan K. de Ghizé, 71  
Violaine de Larminat, 72, 73  
Roberta De Piccoli, 74  
Fabio De Sanctis De Benedictis, 75  
Emanuele Del Verme, 76  
Ian Dickson, 77  
Felix Diergarten, 78, 230  
Mine Doğantan-Dack, 79  
Norton Dudeque, 80  
Frédéric Dufeu, 81  
Carlos Duque, 82  
  
Florian Edler, 83  
Ivan Elezovic, 84  
Jan Ezendam, 223  
Enrica Fabbri, 85, 117

Candida Felici, 86  
Emanuele Ferrari, 87, 224  
Aurélie Fraboulet-Meyer, 88  
Reiko Fueting, 89  
Shigeru Fujita, 90  
Federico Furnari, 91  
Hans-Ulrich Fuß, 92  
  
Maurizio Gabrieli, 93  
Catello Gallotti, 94  
Germán Gan-Quesada, 95  
Maurizio Giani, 151  
Domenico Giannetta, 96  
Adriano Giardina, 97  
Paula Gomes Ribeiro, 98  
Henri Gonnard, 99  
Jeremy Grall, 100  
Roger Mathew Grant, 101  
Serge Gut, 102  
  
Chelsey Hamm, 103, 104  
Xavier Hascher, 105  
Alexandros Hatzikiriakos, 67  
Frank Heidlberger, 106  
Elisabeth Heil, 107  
Panu Heimonen, 108  
Sigrun Heinzelmann, 109  
William Helmcke, 110  
Richard Hermann, 111  
Melissa Hoag, 112  
Ludwig Holtmeier, 113  
Mart Humal, 114  
Anne Hyland, 115  
  
Michel Imberty, 116  
Iolanda Incasa, 85, 117  
  
Steven Jan, 118  
  
Vasilis Kallis, 119  
Susana Kasyan, 120  
Ildar D. Khannanov, 121  
Jin-Ah Kim, 122  
Aleksandar Kontić, 213  
  
John Koslovsky, 50  
Kerri Kotta, 123, 136  
Julia Kreinin, 124  
Walter Kreyszig, 125  
Martin Küster, 126  
  
Annie Labussière, 127  
Andrea Lanza, 151  
Sergio Lanza, 128  
Olivier Lartillot, 25, 129  
Audrey Lavest-Bonnard, 130  
Federico Lazzaro, 131  
Laurence Le Diagon-Jacquin, 132  
Raphaëlle Legrand, 133  
Iwona Lindstedt, 134  
Cosima Linke, 135  
Gerhard Lock, 136  
Ana Lombardía, 137  
Sandrine Lopez-Ferrer, 138  
Joseph Lubben, 139  
Marco Lutzu, 140, 141  
  
Ignazio Macchiarella, 141, 142  
Su-yin Mak, 143  
Andrea Malvano, 144  
Marco Mangani, 145  
Eva Mantzourani, 146  
Liviu Marinescu, 147  
Marco Marinoni, 148  
Sandro Marrocù, 149  
Marie-Noëlle Masson, 150  
Mauro Mastropasqua, 151  
Giada Matricardi, 189  
Grantley McDonald, 52  
Richard McGregor, 152  
Nicolas Meeùs, 30  
Nathalie Meidhof, 153  
Johannes Menke, 154  
Renaud Meric, 155  
Juan A. Mesa, 103, 156  
David Mesquita, 157  
Danuta Mirka, 158  
Andreas Moraitis, 159  
Domenico Morgante, 160

Hubert Moßburger, 161

Angelika Moths, 162

Bruno Moysan, 163

Dieter A. Nanz, 164

Markus Neuwirth, 165, 230

Hiroko Nishida, 166

Richard Parncutt, 41, 231

Susanna Pasticci, 167

Alessandra Carlotta Pellegrini, 168

Maria Perri, 169

Wayne Petty, 170

Olivier Pigott, 171

Elisabetta Piras, 225

Ève Poudrier, 172

Egidio Pozzi, 173

Christoph Prendl, 174

Robert Rabenalt, 175

Fabio Regazzi, 85

Sarah J. Reichardt, 176

Massimo Rizzo, 141, 177

Uri B. Rom, 178

Paola Ronchetti, 179

Markus Roth, 180

Katrina Roush, 103, 181

Nathalie Ruget, 182

Marja Saarela, 183

Daniele Sabaino, 145

Marie Bernadette Sabatelli, 39

Michela Sacco, 27

Michael Saffle, 184

Damien Sagrillo, 185

Giorgio Sanguinetti, 232

Simonetta Sargent, 226

Gerardo Scheige, 186

Roberto Scoccimarro, 187

Claudia J. Scroccaro, 188

Giuseppe Sellari, 189

Anne Smith, 227

Johannes Söllner, 190

Michael Spitzer, 191

Marco Stacca, 192

Manfred Stahnke, 228

Ana Stefanovic, 193

Gaetano Stella, 194

Mariateresa Storino, 195

Francesco Stumpo, 196

Paolo Sullo, 197

Lauri Suurpää, 198

Johannella Tafuri, 199

Philip Tagg, 233

Marco Targa, 200

Bianca Țiplea Temeș, 201

Paolo Teodori, 202

Mário Marques Trilha, 203

Costas Tsougras, 204

Corey Tu, 69

Steven Vande Moortele, 230

Edward Venn, 205

Luigi Verdi, 206

Nicola Verzina, 207

Claudio Horacio Vitale, 208

Caroline Waight, 209

Patrick Uribe Wood, 210

Yi-Cheng Wu, 211

Lufan Xu, 143

Grace Yu, 212

Miloš Zatkalik, 213

Franz Zaunschirm, 214

Konstantin Zenkin, 215

Ida Zicari, 216

## PROGETTO NETSOUNDS

• NetSounds è un progetto di Network Europeo (LLP-EACEA) nato per promuovere l'uso delle tecnologie digitali e degli strumenti del social networking nell'educazione musicale. • L'idea di Net Sounds è quella di consentire al mondo dell'istruzione, dell'università, e dell'impresa, di integrare la loro azione per sostenere il rinnovamento dell'educazione musicale nei sistemi dell'istruzione e della formazione in Europa; facilitare lo scambio e la condivisione in rete di prodotti, conoscenze e pratiche di successo in questo ambito di ricerca e di intervento.

• Il progetto Net Sounds esplora il futuro della formazione musicale in rete anticipandone alcuni dati salienti. Propone una riflessione sulle forme dell'abitare il nostro tempo declinata verso una pragmatica dell'apprendere e del vivere replicabile nell'insegnamento e sperimentabile, all'infinito, attraverso la creatività. Il suo nucleo sono la musica e le tecnologie, poli di identità e di attrazione in ogni cultura del mondo.

• Tra i principali obiettivi educativi del XXI possiamo sottolineare l'importanza di fornire agli studenti strumenti e conoscenze per:

- essere sintonizzati sul presente e sul futuro
- essere ciò che vogliono essere
- essere padroni del proprio destino
- abbattere il divario tra attesa e realtà, tra sogno e vita

• La competenza digitale e l'espressione creativa attraverso la musica costituiscono sicuramente due elementi centrali di questa nuova alfabetizzazione. Offrire ai diversi attori che operano nell'ambito della ricerca, della formazione e della produzione, la possibilità di conoscere ed impiegare, in maniera consapevole ed in una prospettiva di innovazione, gli strumenti operativi e culturali collegati al binomio musica e tecnologia costituisce perciò una occasione preziosa per:

- a) favorire lo sviluppo di competenze chiave per l'apprendimento permanente;
- b) rafforzare la motivazione degli studenti ad impegnarsi nell'apprendimento;
- c) consolidare i legami tra istruzione, formazione e mondo del lavoro;
- d) promuovere una più stretta integrazione tra pratiche formali ed informali di accesso e condivisione della conoscenza;
- e) accedere creativamente ad una nuova dimensione concettuale ed operativa.

### Come raggiungere gli obiettivi di Net Sounds?

- Il progetto mira a promuovere l'insegnamento della musica attraverso le tecnologie informatiche e le reti sociali del Web 2.0, coniugando passioni personali e rigore formale, in una non astratta visione dell'alfabetizzazione contemporanea.
- Informare gli attori sociali, creare consapevolezza negli attori politici, diffondere la conoscenza delle buone pratiche di ricerca e di utilizzo delle TD nell'educazione musicale realizzate in Europa, sono i principali strumenti attraverso i quali NET Sounds durante i suoi tre anni di vita progettuale (2009-2012) agirà sui gruppi più direttamente a contatto con la realtà scolastica e musicale, e a lungo termine potrà influire sul cambiamento di sistema dell'Educazione e sui comportamenti dei soggetti coinvolti (studenti, insegnanti, formatori e professionisti).

### Chi può partecipare

- Chiunque operi nell'ambito dell'istruzione e della formazione collegati alla musica, docenti di scuole, università, centri di ricerca, conservatori, etc. Aziende di settore che operano nell'ambito della ricerca, della produzione e della commercializzazione di software e hardware per la creazione musicale. Decisori politici presenti nelle istituzioni Europee e nei Sistemi formativi nazionali a livello nazionale e regionale.

• Visitate il portale del progetto:  
[www.netsoundsproject.eu](http://www.netsoundsproject.eu)

# Gruppo Analisi e Teoria Musicale

**President:** Mario Baroni

**Board:** Mario Baroni, Rossana Dalmonte (Vice-president), Johannella Tafuri

**Scientific Committee:** Mario Baroni, Antonio Caselli, Luisa Curinga, Rossana Dalmonte, Ignazio Macchiarella, Luca Marconi, Susanna Pasticci, Egidio Pozzi, Guido Salvetti, Giorgio Sanguinetti, Giuseppe Sellari, Johannella Tafuri

The G.A.T.M. publishes with LIM (Libreria Musicale Italiana, Lucca), two yearly of the *Rivista di Analisi e Teoria Musicale* (R.A.T.M.) and the series *Manuali d'analisi e teoria musicale* for Universities and Conservatoires. With the same publishing house and in collaboration with the Società Italiana di Musicologia, the G.A.T.M. also publishes the series *Repertori Musicali. Storia, Analisi, Interpretazione*. Furthermore it collaborates to the online journal *Analitica. Rivista online di Studi Musicali/Online Journal of Musical Studies* (in <http://www.gatm.it/analitica/index.htm>) and to the organisation of its annual conferences.



## R.A.T.M. - Rivista di Analisi e Teoria Musicale

**Editor:** Mario Baroni

**Assistant Editor:** Rossana Dalmonte, Giorgio Sanguinetti

**Editorial Assistant:** Johannella Tafuri

## Analitica - Rivista online di Studi Musicali

**Editor:** Egidio Pozzi

**Scientific Committee:** Mario Baroni, Rossana Dalmonte, Susanna Pasticci, Giorgio Sanguinetti

**Editorial Board:** Alessandro Bratus, Antonio Caselli, Fabio Cifariello Ciardi, Catello Gallotti, Giuseppe Sellari

## Manuali d'Analisi e Teoria Musicale

### Titles:

- Mario Baroni, *L'orecchio intelligente. Guida all'ascolto di musiche non familiari*, 2004
- Johannella Tafuri, Gary McPherson (editors), *Orientamenti per la didattica strumentale. Dalla ricerca all'insegnamento*, 2007
- Mario Baroni (editor), *L'insegnamento come scienza. Ricerche sulla didattica della musica*, 2009

## Repertori Musicali. Storia, Analisi, Interpretazione

**Editorial Board:** Bianca Maria Antolini, Mario Baroni, Rossana Dalmonte, Guido Salvetti (chair), Licia Sirch

### Titles:

- Guido Salvetti, *Le Sonate per pianoforte e violoncello di Johannes Brahms*
- Marino Pessina, *Le ballate di Fryderyk Chopin*
- Alfonso Alberti, *Le Sonate di Claude Debussy*

## SUBSCRIPTION TO G.A.T.M. AND R.A.T.M.:

**€ 15:** members of SIdM (Società Italiana di Musicologia), SIEM (Società Italiana per l'Educazione Musicale), IASPM (International Association for the Study of Popular Music).

**€ 25:** non soci

### Payment should be made in one of the following ways:

- by bank transfer: IBAN IT 80 K 01030 13701 000000682017;
- by credit card, via [www.lim.it](http://www.lim.it);
- by post to account n. 11748555, addressed to LIM Editrice, via di Arsina 296/f, 55100, Lucca;
- [www.lim.it](http://www.lim.it), follow: Catalogo/Libreria Musicale Italiana/Periodici/Rivista di Analisi e Teoria Musicale/Abbonamento annuo/Modulo d'ordine.

