

THE MAKING OF MUSICAL TIME Temporality in Musical Composition and Performance

INTERNATIONAL SEMINAR
25-26 February 2015
Orpheus Institute, Ghent Belgium

Orpheus Institute Seminar 2015

In modern and contemporary Western culture music has a foundational temporal dimension, since any notated acoustic phenomenon, be it sound or noise, is inevitably produced and experienced in time. However, the relation between music and time is, at least, twofold: music unfolds in time, but it also generates time, creating particular temporalities outside of the physically measurable time. Music has the power to shape and even suspend time.

The temporal dimension of music depends on diverse cultural, social, and performative contexts. In this respect, the role of music notation becomes particularly relevant as it symbolizes and visualizes the temporal aspect of music. Notation is both the result of a measurable concept of time and a necessary tool for the structuring of time. Throughout the history of notated Western art music two main strategies for notating time are recognizable: one based on multiples of a fixed unity of measurement (striated time), the other relying on flexible or irregular patterns more freely placed in a sonic landscape (smooth time). In both cases, even if the notation is extremely accurate, something is still missing, so that the performer and the listener have to complete and fulfill the sense of the score by other means (further contextualization, oral history, aural transmission of knowledge, etc.).

Seminar Organising Committee 2015

Research Fellows Paulo de Assis, Bob Gilmore and Doctoral researcher Tiziano Manca

The Seminar Organising Committee also wishes to thank Heike Vermeire, Kathleen Snyers and Jonas Tavernier for their tireless assistance in organizing this event.

SCHEDULE

Wednesday 25 February 2015

12:30-13:30	Registration
13:30-13:45	Paulo de Assis, Welcome and Introduction
13:45-14:45	Keynote speech Dorit Tanay – <i>Marchetto da Padua and the Making of the Modern Composer</i>
Break	
15:00-15:30	Andrew Lawrence King - A baroque history of Time: Stars, hearts & Tactus
15:30-16:00 Break	Robert Hill – Kairos <i>as Paradigm: Timing as Structured Improvisation in Francois Couperin's</i> L'Art de Toucher le Clavecin
16:30-17:00	John Irving – How time flies: making sense of notated sounds and rests in Haydn's solo keyboard sonatas
17:00-17:30	Catherine Laws – Neither: between time and memory at the piano. (For Bob)
Break	
18:00-19:00	Keynote speech Gianmario Borio – On Constructing Musical Time: Philosophical and Compositional Implications of a Key Question for Twentieth Century Music
Dinner	
20:30	Concert Martin Scherzinger – <i>Piano Etudes</i> (2012-2014) (20') Bobby Mitchell, piano
	Martin Scherzinger – The Typewriter Opera (2012) [video] (15')
	Tiziano Manca, <i>Stur</i> for guitar (10') Nico Couck, guitar
	Intermission
	Brian Ferneyhough – <i>Kurze Schatten II</i> (8') Diego Castro Magas, guitar
	Morton Feldman – <i>Palais de Mari</i> Catherine Laws, piano (25')

Thursday 27 February 2014

09:30-10:30	Keynote speech Martin Scherzinger – <i>Algorithms of Musical Time (from Biopower to Neuropower)</i>
10:30-11:00	Nicholas Brown – From the Temporality of Pulse to the Generation of Sounds
Break	
11:30-12:00	Eric Maestri – Analogical and Digital Musical Time Projections
12:00-12:30	Martin Scheuregger – Inventing fragments, manipulating time
12:30-13:00	Danielle Sofer – "I Keep Memory at Arm's Length": Erotic Possibilities of Time- Stretching in Electroacoustic Music
Lunch	
14:00-14:30	Liam Flenady – The Ideology of Polyphonic Time
14:30-15:00	Jan Michiels – Performing Picture Puzzles
Break	
15:30-16:00	Floris Schuiling – 'Making, Not Filling Time': Improvisation, Notation and the Mediation of Temporalities
16:30-17:00	Diego Castro Magas – Walter Benjamin's concept of historical time in Brian Ferneyhough's guitar music
17:00-18:00	Wrap up (Bill Brooks)

PRESENTERS ABSTRACTS AND BIOGRAPHIES

(in order of appearance)

Marchetto da Padua and the Making of the Modern Composer Dorit Tanay (Tel Aviv University)

KEYNOTE SPEAKER

The question of the birth of the modern author has been a focal theme in recent Dantesque and Petrarchian studies. These two seminal figures are known for their radical transfiguration of the medieval notion of auctor and auctoritates. In my presentation I will focus on the Italian music theory of Marchetto da Padua and propose that his approach to musical temporality and its notational representation can be explained by examining his thought in the context of its surrounding intellectual culture. To delve deeper into the roots of the Italian mode of writing music, Italian cultural/intellectual history will be compared to the French intellectual tradition in order to account for the fundamental differences yet also similarities between the Italian and French systems of writing and articulating musical temporality. Reading Marchetto's musical theory through the prism of contemporary Italian literary culture makes possible to endow Marchetto with the title of the "Maker of the Proto-Modern Composer."

Prof. **Dorit Tanay** graduated the Rubin Music Academy at Jerusalem as a pianist. Switching her focus from practice to the history and theory of music, she studied Musicology and History at the Tel Aviv University and completed her Ph.D studies in both Musicology and Medieval Studies at the University of California, Berkeley with a dissertation on Music in the Age of Ockham: The interrelations between Music Mathematics and Philosophy in the 13th and 14th Centuries. Her dissertation evolved into her 1999 book Noting Music Marking Culture: The Intellectual Context of Rythmic Notation, 1250-1400. Since 1987 she is a faculty member in the Musicology department of Tel Aviv university. During her Fellowship at the Dibner Institue MIT (1998/9) she studied both the birth of opera and the transition to triadic harmony within the broader context of the scientific revolution and published several articles on these topics. Recently she has published articles on the relation between late medieval economical thought and Johannes de Muris' rhythmic theory, and on issues related to Trecento theories of language and the Ars subtilior. She is currently working on a book entitled Writing Music in the Age of Dante and Petrarch: The Interrelation between Music, Rhetoric, Grammar, and Poetry.

A baroque history of Time: Stars, hearts & Tactus

Andrew Lawrence King

The Science, Art and Practice of Music depend on the period understanding of Time. The phenomena of Quantum Time and Relativity remain counter-intuitive today, a century after Einstein's annus mirabilis. We still live in Newton's Absolute Time (*Principia*, 1687).

Around the year 1600, composers understood Time according to the pre-Newtonian, Aristotelean concept of Time as a 'Number of Change in respect of Before and After'. The most significant Change was the movement of the heavens, defining Time on the long scale: the year, the day. The sun's zenith defined the moment of noon; earthly clocks divided noon-to-noon into 24 hours, even into minutes. The very best clocks could indicate seconds.

But the only clock that could confirm Galileo's observation of the pendulum effect was his own pulse. When he needed split-second timing, only Music could sub-divide one minim per second (corresponding to the heartbeat at rest) into semiquavers (1/8th sec). Time did not measure Music, Music measured Time. Time was not regarded as multiples of a short unit, but was perceived by (human) division of the (divine) slow beat. In practice, musical time was organised by the Tactus.

Tactus is where period Science, Art and Practice meet; where music notation is calibrated against Real Time. But without precise clocks, that calibration was necessarily subjective. Musicians experienced the Quality of Time, even if they could not specify its precise Quantity against any Absolute scale.

The Quality of Monteverdi's Time is Divine, ineffably long-term; Human, in the heartbeat or in walking; Instrumental in a pendulum-swing or the down-up motion of the Tactus- hand. Time breathes, flies, limps. In its subdivisions, Time is moulded by human hands: a 'half' is not exactly 50%. Humanist Time is regular, but subtly shaped. Time has 'grooves'.

Emotions alter our perception of Time. Changes of *affetto* influence the Quality of musical Time, not only its Quantity. Even when precision Quantitative measurement became available, musicians still preferred Qualitative descriptions. The Quality of Time is not strained, measured by metronome, controlled by conductor, randomised by rubato. It swings like jazz. Its deep breathing can hypnotise the performer into Flow, and mesmerise audiences into Trance.

Tactus transports us to that mysterious Zone where objective notation and subjective perceptions meet in the eternal Now of performance. Quality Time lies in music's transcendental mystery, in our hearts, as well as in our hands.

Baroque opera & orchestral director, Early Harp virtuoso and imaginative continuo-player, specialist in baroque gesture and Historical Action, Andrew Lawrence-King is one of the world's leading performers of Early Music and the most recorded harpist of all time. In 2012, he won the Golden Mask, Russia's top theatrical award, for the first opera, Cavalieri's Anima e Corpo (1600) at the Natalya Satz Theatre. In 2013, he directed (stage & music) the first performance in modern times in Spain of the earliest Spanish Oratorio (1704), and the first staged production in modern times of Landi's La Morte d'Orfeo (1619). Last year he directed the first-ever performance in Russia of Monteverdi's Vespers. As harp soloist, Andrew won the 2011 Grammy for Best Small Ensemble Performance in Dinastia Borgia directed by Jordi Savall: in 2013 his duo recital with Jordi won Australia's prestigious Helpmann Award for Chamber Music Performance. As Senior Visiting Research Fellow for the Australian Research Council's Centre of Excellence for the History of Emotions, he is investigating Early Opera and Music & Consciousness. Andrew Lawrence-King's ensemble, The Harp Consort, combines state-of-the art early music performance with stylish improvisation and entertaining stage presentation. Andrew Lawrence-King also directs the opera production company Il Corago, researching, performing and teaching Historical Action. Andrew is an RYA Ocean Yachtmaster, a student of 17th-century Italian Rapier, and a qualified hypnotist.

How time flies: making sense of notated sounds and rests in Haydn's solo keyboard sonatas

John Irving

Discussions of Haydn's solo keyboard sonatas are not notable for their debating of noteand rest-lengths. Such details are clearly enough encoded in his notated scores and vary but little in their symbolic representation along a spectrum stretching from early handwritten copies and printed editions through nineteenth-century attempts at Oeuvres Complettes; adaptations of eighteenth-century performance practices to stylistic preferences deriving from changes in instrument design and public situations for the production and consumption of piano music; and recent attempts at so-called Urtext editions. 'On the page', then, note lengths retain a strong degree of fixity in these pieces.

But for performers, this situation is far more fluid and may radically affect fundamental issues in our interpretation of Haydn's music. This presentation, including live performance of excerpts from four of Haydn's solo sonatas (Hob.XVI:46/32/40 and 49, stretching across much of his composing career), will examine in detail the significance of note- and rest-lengths in performance contexts. Two areas will receive particular consideration: construction of real-time narratives in performance through deliberate distortion of Haydn's notated lengths (conforming to historically-informed principles of dissonance treatment, for instance); and the significance of instrument technology, tracing the effect of contrasting types of sound production on keyboard instruments from Haydn's day with what is still the single most familiar means of performance representation today - the modern grand piano. Largely for practical reasons, and

notwithstanding the fact that Haydn's sonatas were composed with a wide range of keyboard types in mind (including at least two species of Viennese fortepiano, as documented in the composer's letters), the performance element in this presentation will be confined to just one keyboard type: the clavichord, an instrument not often associated with performances of Haydn's sonatas, yet which, according to Haydn's own testimony, was basic to his habitual mode of keyboard composition. This seemingly radical choice of instrument (though not at all unusual in a historical context in which solo sonatas were typically played in an intimate domestic setting) is one that prompts sharply-focused attention on the matter of how to perform Haydn's notated lengths, and consequently the construction of a temporal sense for both performer and listener.

John Irving is Professor of Performance Practice at Trinity Laban Conservatoire of Music & Dance, London. A noted authority on Mozart, John also performs internationally as a fortepianist, harpsichordist and clavichordist. His five books on Mozart concentrate on the instrumental music and have in reent times turned strongly towards issues of historical performance practice. The merging of his academic and performance work has recently gained widespread popular recognition in The Mozart Project, for which he was a Consultant Editor and in which he appears as author and performer.

Kairos as Paradigm: Timing as Structured Improvisation in Francois Couperin's L'Art de Toucher le Clavecin

Robert S. Hill

Glenn Gould astutely observed that on the harpsichord, "you have a choice between rhythmic inexorability and its converse, which is infinite rubato..." The 17th-century French *prélude non mesuré* generalizes all time values as whole-notes, thus placing responsibility for temporal organization on the harpsichordist's sense of appropriate timing, or kairos. Preferring metered notation for the eight preludes of his *L'Art de Toucher le Clavecin* (1716), Francois Couperin, acknowledging the improvisatory nature of the prelude genre, mandates a *non-mesuré* approach to the timing of the four preludes not expressly marked "*mesuré*". Thus both un-metered and metered notations depend on *kairos*. Critical for a convincing delivery is the player's recognition of his/her responsibility for organizing the timing as an improvisatory response to layers of musical events understood as competing, yet complementary flows of information.

In his *Premier Prélude*, Couperin deconstructs a series of motoric eighth-notes into a complex dialogue between four voices. The resulting web of syncopated rhythms challenge the player to organize their suspension and release, a process which — according to Couperin — ideally causes the harpsichord to emulate the dynamic "swell" behavior typical of bowed instruments of his time. Tweaking the attack and release timings of note-events within the matrix of rhythmic information, the harpsichordist

thus optimizes dynamic effects on this seemingly "undynamic" instrument (a point Couperin himself alludes to).

The method: rather than assuming complementary strong-weak metric units (e.g. two half- notes within a whole-note) to be equal in length (modern convention), the musician chooses to assume that they are usually somewhat unequal to each other. How much longer or shorter, and in which order, is not pre-determined, but rather is guided by the musical, generic and stylistic context. Inequality within pairs of metric units pertains at all relevant levels within the metric hierarchy, causing all levels to be inter-related. Voices are treated independently, with no assumption being made that they must synchronize, even on structurally important beats. The resulting complexity of time-management means that while the *Tonsatz* of a composed work may be largely pre-determined, timing relationships between note-events must nonetheless be regulated in the moment as a dynamic response to changing conditions: i.e., an improvisation. From the improvisatory regulation of timing on the harpsichord, it is but a small step to generalizing the *kairos* of musical timing as an alternative paradigm to the convention of pre-determined motoric rhythm: we need only adjust our parameters to fit the respective genre.

American harpsichordist, fortepianist and musicologist **Robert Hill** has been Professor of Historical Keyboard Instruments at the Freiburg Musikhochschule since 1990. After his studies with Gustav Leonhardt at the Amsterdam Conservatory, he earned his PhD in musicology at Harvard University with a dissertation on the early keyboard music of J. S. Bach. From 1986-1990 he was Assistant Professor of Musicology at Duke University. A distinguished performer on early keyboard instruments, Robert Hill performs repertoire from the late Renaissance to theNeoclassical periods. As a musicologist, he actively researches the reconstruction of 19thcentury performance practice, in particular the lost tradition of tempo modification.

Constructing musical time. The philosophical and compositional implications of a central question in twentieth century music.

Gianmario Borio (University of Pavia, Italy)

KEYNOTE SPEAKER

In this lecture, I discuss two major currents in the comprehension of musical time that appeared in the twentieth century, which can be summarized by an opposition between a 'monistic' and a 'dualistic' conception of time (well represented by Theodor W. Adorno and Pierre Souvtchinsky). Various theories developed by musicians during the second half of the century (in particular by serial and spectralist composers) created the conditions for a reconciliation of these positions and a reformulation of the entire question; this change of perspective was made possible by the elaboration of complex structures of sound and an increasing awareness of the multidimensionality of the experience of time.

Gianmario Borio graduated in Philosophy at the Università di Torino and gained his PhD in Musicology at the Technische Universität Berlin. He held research fellowships from DAAD, the Paul Sacher Foundation and the Alexander von Humboldt Foundation. 1993-1999 he was Associate Professor of Musicology at the Università di Pavia, since 2000 he has been Full Professor at the same university. In 2012 he was nominated director of the Institute for Music of the Fondazione Giorgio Cini (Venice).

In 1999, Borio was awarded the Dent Medal by the Royal Musical Association. He has been visiting professor at various institutions in Europe, Canada and the USA. In 2013, he was Distinguished Visiting Professor Compagnia di San Paolo at The Italian Academy for Advanced Studies in America (Columbia University, New York).

He has been a member of the editorial board of the journals "Il Saggiatore Musicale" (1994-2010) and "Acta Musicologica" (2000-2010); since 2005 he is a member of the editorial board of "Filigrane" and since 2008 of the "Swiss Yearbook for Musicology". He is a member of the advisory boards of "Journal of the Royal Musical Association", "Music Analysis", "Twentieth Century Music" and "Il Saggiatore Musicale." From 1994 to 2010 he was a member of the scientific board of Archivio Luigi Nono (Venice) and since 2010 of the Centro Studi Luciano Berio (Florence). Since 2006 he has been a member of the artistic committee of the Milano Musica Festival.

In 2002-2003 and 2005-2006 he was scientific director of a project on the History of Musical Concepts (supported by the Italian Found for Research and University). From 2006 to 2010 he directed, together with Hermann Danuser and John Rink, the European Network for Musicological Research. He is co-director of a research group on the interpretation of audiovisual works. (http://www.worldsofaudiovision.org).

Neither: between time and memory at the piano. (For Bob)

Catherine Laws

This presentation explores the ways in which Morton Feldman's approach to composition for piano manifests the experience of time and memory. It is written as a thank you to Bob Gilmore, one of the organisers of this seminar, who died of cancer at the very start of the year. I enjoyed many conversations about the music of Feldman (amongst other composers) with Bob, often after he had listened to me play Feldman's piano music. These conversations frequently returned to the topic of memory. The paper owes this debt to Bob, but also another: he was, for me, a model scholar. I have imagined him looking over my shoulder as I write, bearing in mind what I admired so much about his work.

The prime focus of the presentation is a consideration of the experience of performing the late piano music of Morton Feldman in relation to – and partly in contradiction to – the rhetoric about time and memory that surrounds this music. Feldman voiced thoughts on time, duration, sound and memory throughout his compositional career. He consistently accused Western composers of abandoning a true appreciation of qualities of sound, fetishizing instead the relationships between sound events: music, he felt, was often nothing but 'a paraphrase of memory'. From this there resulted a trajectory from Feldman's earlier attempts to minimize the role of memory, so as to focus on individual sounds as if in isolation from context, through to a later attempt at 'formalizing a disorientation of memory' in his later compositions. The works of the mid-1970s onwards create complex perceptual effects, combining a predilection for very soft sounds that draw attention to timbre, texture and decay, with formal processes that imply repetition while nevertheless evading pure reiteration, presenting fractionally changing materials in ever-different contexts: the simultaneous, paradoxical impression of progression and stasis. However, Feldman's own comments on his conception of time and the operations of memory are by no means unambiguous. Likewise, the considerable discourse on his music can be disconcertingly contradictory, with some writers claiming for Feldman an ability to capture the instant, achieving a state of pure presence, while others hear in his music the essence of temporal connection, of memory making.

I argue here that this is not an either/or situation, but rather that Feldman's late music effects a productive uncertainty with regard to the relationship between time and memory. Specifically, I focus on the notation in the late piano pieces – entirely conventional in appearance – and its impact on my sense, in performing this music, of being caught in a state of betweenness: between the inescapable onward drive of striated time, marked by the silent ticking in the head of the ictus that lies beneath Feldman's layers of metrical and rhythmic organisation, and the smoothness of embodied memory in action, with reiterated shapes and forms across the keyboard feeling similar, seeming recognisable through movement, stretches and touch, even

when the chords sound and resonate differently. The main focus of this presentation will be Feldman's final piece for piano, Palais de Maris (1986). The piece will be performed in the evening concert.

Catherine Laws is a pianist and musicologist. She is a Senior Lecturer in Music at the University of York and a Senior Research Fellow at the Orpheus Institute, Ghent.

As a performer, Catherine specializes in contemporary music, often working collaboratively with composers to explore the wide and subtle variations of touch, tone, dynamic and texture possible on the modern piano, and the innate drama of interactions between performer, instruments and audience. Catherine also performs with two ensembles: the music theatre group Black Hair and amplified experimental ensemble [rout].

Most of Catherine's research lies in two areas: contemporary music performance practices and the relationship between music and language. Current practice-based projects are concerned with: 1) embodiment and subjectivity in contemporary music performance; 2) processes of collaboration between composers and performers. Much of Catherine's published musicology examines the relationship between music, language and meaning. She is currently completing a book on music in the work of Samuel Beckett and composers' responses to his work.

Analogical and Digital Musical Time Projections

Eric Maestri

Composers project musical events in time. The instant of the composition is in fact a projection of musical events towards an imprecise future: the scene, the sound, the body of the musician are projected future presences. In this proposal the concept of time projection and compositional effort are central.

From the point of view of the composer, time and musical events define an hybrid dimension: composers alternate an objective and subjective experience of sound, making the temporal experience multidimensional. This multiplicity is incorporated in the notation system. Time is perceived throughout the tensions between sounds that are observed from the point of view of the chronometric perspective; the awareness of the chronometric time is related with the awareness of the modifications that the perception of sound implies: musical events give substance to the subjective existential experience of time and time allows the measurement of the perceived sound; the subjective, the intersubjective and the objective are melt together in the multiple dimension of time. This correlation acts as fundamental in the compositional experience: composers make efforts of projection, oscillating between different temporal representations.

An important part of this effort depends on the type of means. Composer projects musical events in the form of sounds in the space, for instance in electronic music, or in

the form of gestures, as physical presence of the performer, in instrumental music: scores and softwares provide two different approaches to musical time.

Assuming this perspective we try to highlight the relationship between time projection and compositional means. We observe that the strategies of projection of musical forms are today based on traditional analogical representations and digital ones; we think that these means are substantially different and afford two contrasting musical temporalities. While the analogical writing, the score, is based on projections of direct physical actions via symbolic proprioceptive transfer, the digital one is based on digital projections constructed on multiple transfers and codifications of informations for the machine. Composers act in interaction with these contrasting means.

In this sense we will show the constraints of the analogical and digital means in order to reveal their essential characteristics that afford the compositional strategies.

Eric Maestri, composer, researcher and producer works and live in Strasbourg. His Ph.D thesis on mixed music is supported by LabEx Gream, University of Strasbourg in collaboration with CIEREC, Université Jean-Monet, Saint-Etienne, France. As composer he presented his music in various venues, among them Ircam, Festival Agora, Biennale Venice, Milano Musica, Berlin Konzerthaus. Eric's main studies are focused on the study of the modifications that electronics involved in music from the perspective of musical representation, perception and compositional approaches. www.ericmaestri.eu

Inventing fragments, manipulating time

Martin Daniel Scheuregger

Various forms of musical brevity exist in twentieth-century and contemporary music – fragmentation is, perhaps, one of the most intriguing. The notion of the fragment as distinct from the miniature is important: a miniature is akin to a portrait in a locket (a tiny work that shares the features of a life-sized painting); the fragment is a part of the larger painting that has been torn away, not showing a whole picture but merely hinting at it. By using fragmentation in composition, composers can partake in the fragmentary in a number of ways. David Metzer describes two types of fragment: the 'remnant' (a fragment from an original whole) and the 'invented' fragment. Musical works using fragmentation may draw on remnants of extant works, but many invent their fragments.

This paper will explore how musical time is manipulated by the use of the 'invented' fragment in my own compositions, focussing on a set of three interlinked works that utilise short movements characterised by splintered phrases and forms. By being in themselves short whilst suggesting larger forms, these fragments simultaneously speak of ultimate brevity and invoke the almost infinite. By framing this fractured material in a variety of ways, the perceived flow of time is manipulated as the music rapidly moves

from one movement to the next. The manner in which this is achieved and the potential perceptual affects will be explored with audio-visual illustrations of the works in question.

Further context will be given by drawing on issues raised in a recent edition of Contemporary Music Review — 'Musical Narratives: Studies in Time and Motion' — and highlighting analytical observations drawn in my article on György Kurtág's Kafka Fragments, a work that creates continuity through a network of cross-references and careful structuring of 40 fragments. By comparing extant notions of fragmentation, observations from Kafka Fragments and insight into my own compositional practice, some light will be shed on how creating fragments can allow composers to manipulate the perceived flow of musical time.

Martin Scheuregger is a PhD candidate at the University of York (funded by the Arts & Humanities Research Council) and Doctoral Fellow of the Humanities Research Centre. He takes an inter-disciplinary approach to research, combining musical analysis and composition as he explores notions of time and brevity in twentieth and twenty-first century music. Martin is Composer-in-Residence at the British Music Collection (University of Huddersfield), and codirector of contemporary music ensemble Dark Inventions. www.scheuregger.co.uk

I Keep Memory at Arm's Length": Erotic Possibilities of Time-Stretching in Electroacoustic Music

Danielle Sofer

In audio signal processing, time-stretching is the process of changing the duration or speed of an audio signal without affecting its pitch. A sound source becomes stretched by first being parsed into grains of a discrete duration as determined by the sampling rate. When reinterpolated by way of granular synthesis, individual samples are recombined at varied sampling rates to form a durational periodicity, or rhythm, and given sound's periodic waveforms, sampling is also responsible for the perceived pitch and timbre, such that the unique composition of sound in an electroacoustic work is wholly determined by the construction of that work's temporality.

Composer Barry Traux suggests that time-stretching is a manner of getting "inside" sound (1990), and claims further, that time-stretching offers an intimate, sensual, and even erotic engagement with sound (2003). Truax was not the first to construe an erotic relationship with time. In 1926, Pierre Janet defined erotic jouissance as one psychological phenomenon of memory, an inherent property of temporal experience. Moreover, Janet's notion of eroticism evidently intrigued many twentieth-century philosophers preoccupied with time, as he is referenced in Maurice Merleau-Ponty's Phenomenology of Perception (1945) and later also in Gilles Deleuze's Difference and

Repetition (1968). Both Merleau-Ponty and Deleuze accept Janet's supposition of time's erotic potential, proposing two independent philosophies that bind memory to one's present orientation and erotic sensations to one's perceived temporality. If, after Janet, Merleau-Ponty and Deleuze, temporal distance is inherently erotic, then, following Truax, the process of time-stretching is likely to further enhance sound's erotic potential.

It is by now well-accepted that the cognition and comprehension of music are linked to memory, where past experience makes it possible to hear music one has never heard before with partial familiarity. In Deleuzian terms, musical time is consequently experienced through a repetition of the familiar at once defamiliarized. With this in mind, Denis Smalley (1993) once defined transformation in electroacoustic music as "travelling a certain distance" from a particular "sonic base," a definition with obvious parallels to Janet and Deleuze—sans the sex. Referring to musical examples from Pierre Schaeffer, Barry Truax, and Annea Lockwood, this paper returns to Smalley's notion of transformation to explore some erotic possibilities of time-stretching in electroacoustic music.

Danielle Sofer is a Ph. D. candidate in the Institute for Music Aesthetics at the University of Music and Performing Arts Graz, Austria, where she is completing a dissertation entitled, "Making Sex Sound: Erotic Currents in Electronic Music." Danielle graduated summa cum laude from SUNY New Paltz, and she holds master's degrees in Piano Performance from Binghamton University and in Music History and Theory from Stony Brook University. She has published on central European music of the 1920s and on links between electronic music and sexuality. A forthcoming article questions the presumed modernist allegiance to "structural listening," and a book co-edited with Christa Brüstle, on the life and work of composer Elizabeth Maconchy, is forthcoming in 2015 from Universal Edition.

The Ideology of Polyphonic Time

Liam Flenady (Composer)

This paper examines the issue of multiplicity of time in modern polyphonic music through the lens of ideology. Drawing upon Marxist theorists and Christopher Small's theory of 'musicking', it briefly outlines a theory of the ideology as embedded in the relations between lines within polyphonic music. The paper argues that polyphonic music has a particular ideological function, insofar as the musical performance of a polyphonic work stages relations between human beings in an idealised form. It suggests that Western polyphonic music, as ideology, has often played a role in representing a form of ideal and integrated community that is unavailable in class society.

Yet under conditions of modernity and the breakdown of tonal syntax, simple representations of idealised social relations became problematised. This has resulted in a variety of different approaches to polyphony and the emergence of the possibility of multiple simultaneous temporal layers in music. This paper delineates a number of different approaches to multi-temporal construction, from Ivesian stratification, to proportional constructions in Elliott Carter and Gerard Grisey, to the metric framing of Brian Ferneyhough. It links each of these to a different ideology of individual and collective by interrogating the relationship of line to line, and of lines to the written metre.

The paper concludes by sketching the author's own approach to temporal layering in polyphonic composition, as he is developing it in his PhD research on the idea of 'counterpoint' today. This approach involves defining a common metric structure with its own processual teleogy, and then defining a variety of strategies by which lines can relate to this structure, including non-relation. It thus allows a large degree of control over the dependence and independence of lines from the common metre and from each other. The key stakes of such an approach then are manipulating how parts relate to parts over time (i.e. how to transform one kind of metric function into another), and how parts relate to the whole over time (i.e. to what extent all the voices are 'governed' by the metre, and to what extent they are 'independent' of it). Such an approach puts forward a vision of freedom in music that goes beyond mere stratification, allowing not only freedom from collective structures, but also freedom from individuality itself, and the capacity to form a variety of collective relations.

Liam Flenady is an Australian composer based in Brussels. His music has been performed by the Southern Cross Soloists, Chronology Arts, the Queensland Conservatorium Orchestra, the MAC ensemble, and flautist Bettina Berger, amongst others. His works are also often performed by Brisbane ensemble Kupka's Piano, of which he is a founding member and co-artistic director. Liam is currently undertaking a PhD in composition through Griffith University, and is being supervised by Prof. Johannes Schöllhorn (Cologne), Dr. Gerardo Dirié (Brisbane), and Stephen Emmerson (Brisbane). His topic is 'Radical Counterpoint for the 21st century.'

Liam Flenady has previously studied with Gerard Brophy (Brisbane) and François Nicolas (IRCAM, Paris) as well as receiving lessons from numerous world-leading composers such as Brian Ferneyhough, Beat Furrer, Brett Dean, Martin Bresnick, Pierluigi Billone, and Brice Pauset. In 2008 Liam graduated with First Class Honors from Queensland Conservatorium, receiving the University Medal and Conservatorium Medal. He has received other awards and grants including the Alan Lane composition prize and the Silver Harris and Jeff Peck composition prize, a JUMP mentorship grant through the Australia Council for the Arts, and an Ian Potter Cultural Trust grant.

He has participated a number of summer academies, including the 2011 Impuls International Ensemble and Composers Academy for Contemporary Music, the 2013 Dian Red Kechil Residency for Young Composers in Singapore, and the 2014 Darmstadt Summer Course for New Music. Liam has also presented numerous papers on questions of music and philosophy and is currently

translating with Matthew Lorenzon François Nicolas' major theoretical works La Singularité Schoenberg and Le Monde-Musique.

Liam Flenady is also a committed political activist. He has been involved in a number of environmental and social justice campaigns including anti-cuts, stop coal seam gas, refugee rights, and renewable energy.

Performing Picture Puzzles

Jan Michiels

The Polish pianist and composer Eduard Steuermann – still a well kept secret in pianists' circles – wrote the following lines in 1949: "Arnold Schoenberg once called the musical notation 'das Bilderrätsel', the 'picture puzzle,' as every line of these traditional signs conceals as well as it reveals the secret meaning of the melody, the rhythm, the sonority. It was created by magic – as we do not know what the 'secret' of music is - and we can recreate it by magic only: the magic of devotion and sincerity." During this presentation we will focus on some fragments from Schoenberg's 'Sechs kleine klavierstücke' opus 19 – guided by the lines quoted above and by some other thoughts of Steuermann (collected from his writings in 'The Not Quite Innocent Bystander (ed. C. Steuermann, D.Porter, G.Schuller - Univ. of Nebraska Press - 1983)). Furthermore we will connect these thoughts with Steuermann's own performance notes about Schoenberg's opus 19, and finally with his own recording of these pieces. Steuermann practised and re-created them in close collaboration with the creator of these 'picture puzzles.' May be he can show us ways to solve the puzzles created in 1911? During this presentation we might discover as well what he meant with the magical skills of devotion and sincerity. Skills of a performer who, when it comes to talking about 'making musical time' may reveal himself not only as a bystander, and certainly not as an innocent one.

Steuermann continued in 1949: "There are ideas about the future development of musical notation: they believe the composer will not write his music on paper but will entrust what he hears to the disc, thus speaking directly to the listener and eliminating the erratic performer. But – would it be a good thing?"

As we are in his future now, we could formulate some answers on this prophetic question.

Jan Michiels (1966) studied with Abel Matthys at the Royal Conservatory of Brussels. From 1988 to 1993 he studied at the Hochschule der Künste in Berlin under the direction of Hans Leygraf - he was awarded an exceptional distinction for his interpretations of Bartók's Second concerto for piano and Ligeti's Etudes. He was Tenuto-laureate in 1988; in 1989 he won the international E.Durlet competition. In 1991 he was laureate of the international Queen Elizabeth Competition. In 1992 he was awarded the JeM/ Cera prize for musicians and in 1996 he was signed up as festival star of the Flanders Festival. He is also laureate of the 'Gouden Vleugels/KBC Muziekprijs' 2006.

Jan Michiels is currently active as piano professor in the Koninklijk Conservatorium Brussel, where he also led the class of contemporary music for eight years. He conducted masterclasses in London, Murcia, Hamburg, Oslo, Montepulciano, Szombathely (Bartokfestival). He is fellow in the 'Platform' (VUB-KCB/The Brussels Model) and prepares a doctorate in the arts with the 'New Prometheus' of Luigi Nono as a guide. He regularly performs as a soloist or with chamber music ensembles (a.o. the Piano Quartet "Tetra Lyre" and a piano duo with Inge Spinette) in several musical centres in Europe and Asia, with conductors such as Angus, Asbury, Baudo, Boreycko, Edwards, Eötvös, Märkl, Meylemans, Nézet-Séguin, Ono, Pfaff, Rahbari, Rundel, Soustrot, Stern, Tabachnik, Tamayo, Zagrosek, Zender - but also with dance-productions of Anna Teresa De Keersmaeker, Vincent Dunoyer and Sen Hea Ha. His repertoire reaches from Bach to today. Apart from his many radio recordings, he also recorded cd's with works from a.o. Bach, Bartók, Beethoven, Brahms, Busoni, Debussy, Dvorák, Janácek, Liszt, Rachmaninov, Ligeti, Kurtág and Goeyvaerts (these three last composers appreciated very much his interpretations). The cd 'Via Crucis' - a Liszt-portrait (Eufoda) - received a Caeciliaprize in 2002. He realized different complete cycles: all Beethoven sonatas, all pianoworks of Schoenberg, Webern and Berg and the complete chamber music with piano of Johannes Brahms.

'Making, Not Filling Time': Improvisation, Notation and the Mediation of Temporalities

Floris Schuiling

This paper presents some results from an ethnographic and musicological study of the Amsterdam-based improvising collective the Instant Composers Pool Orchestra. This group, founded in 1967 by Willem Breuker, Misha Mengelberg and Han Bennink and still performing, has developed a highly original and distinctive approach to musical performance. Dissatisfied with notions of 'freedom' in improvisation, yet critical of the traditional hierarchies in composer-performer relations, Mengelberg wrote an extensive and diverse repertoire, employing various notational and compositional techniques to explore the different improvisatory possibilities that they afford. In each performance, the musicians create an improvised collage of a selection of these pieces, juxtaposing and combining them and improvising transitions between them, thus blurring the distinction between improvisation and composition in both name and practice.

Apart from a detailed historical and ethnographic description of a group that is central to a genre that has been underrepresented in music-historical research, this thesis investigates the repertoire of the ICP and its use as an opportunity to reconsider the relation between musical text and performance. In one of my interviews with cellist Tristan Honsinger, he remarked that a good performance was not about 'filling time' but about 'making time'. I take this statement as the starting point of a critique of Alfred Schütz's famous phenomenological account of 'making music together', in which he argues that a shared 'inner time' forms the basis of all social relations. I argue that his account remains resolutely centred on listeners and composers, thus ultimately

neglecting the fact that 'inner time' is not a given, but a product of performers' creative efforts. Drawing on the work of anthropologist Tim Ingold and philosopher John Dewey, I argue that this creative work is more fruitfully described in terms of the interaction between an actor and its constantly active environment than in the strict subject-object distinctions of Schütz. From this ecological perspective, musical performance is less about tuning in to a given flow of inner time than about establishing a rhythm or counterpoint by tuning various heterogeneous temporalities. Musical notations, then, do not take music 'out of time', but become working materials of performers, which engender their own particular temporalities. I illustrate these ideas with musical examples recorded during my fieldwork with the group.

Floris Schuiling was trained as a musicologist and philosopher at Utrecht University and is currently a doctoral candidate at the University of Cambridge supervised by Nicholas Cook. His PhD investigates the repertoire of the ICP Orchestra as a source of creativity in improvised performance. Schuiling's further research interests explore how the diversity of musical notations in use today can be a source of creativity in various musical practices, and what this means for common conceptions of language, orality and literacy in music as well as anthropological theory.

From the Temporality of Pulse to the Generation of Sounds

Nicholas Brown

For the philosophers of Antiquity and the Middle Ages, music was able to provide metaphysical insight into the human condition. In his *Enneads*, Plotinus develops Plato's ideas about a connection between music and the soul in a manner that leads him to emphasize a particular notion of the 'body as instrument'. But it is perhaps the Neoplatonist writing of Augustine of Hippo on the durational nature of human pulse that proposes the most salient correlation between human physiology and the nature of music. In more recent times, the idea of the body as instrument has had significant application in musical thought and creative practice. Theories of the embodied subject have informed musical performance studies and the possibility of extending the capabilities of that embodied subject through prosthetic, computer-based sensor technologies have had wide exploration in recent electroacoustic composition and performance practice.

Against this background of medieval music theory and contemporary music practice, I shall give a lecture/demonstration on my new installation-performance project, *On the Generation of Sounds* (2015). In this work, data from pulse oximeters and computer vision technology is used to process the temporality of vocal sounds in order to build a compositional structure that is informed by techniques of early polyphony. I shall explain how the temporal processing of these vocal sounds is shaped by Augustine's theory of the music of pulse and by a thirteenth-century treatise on the nature of sound, *De Generatione Sonorum*, written by the

English philosopher, Robert Grosseteste (c.1175-1253). I shall also consider how the use of biofeedback data from a performer's pulse, monitored using Arduino-based photoplethysmography, affects the authorial role of the composer in a wider, theoretical context of technologically mediated composition. In addition to theoretical explanation, I shall present a short musical excerpt from the project, which will show how I seek to interpret aspects of medieval music theory through practice-based, artistic research.

Nicholas Brown (UK, 1974) was educated at Oxford University and Manhattan School of Music, New York. He makes various kinds of interdisciplinary works that are informed by issues in the philosophy and psychology of music such as a large-scale theatre work on the relationship between music and memory, As I Have Now Memoyre (2008) and a recent solo exhibition of sound installations, From Birdsong to Light (2013), at Hungate Medieval Art, Norwich, which explored the relationship between music, science and architecture in the Middle Ages. He has also composed an extensive body of concert music, which has featured in international festivals, such as the BBC Promenade Concerts, Huddersfield Contemporary Music Festival, Three Choirs Festival, and Haarlem Koorbiënnale (NL), and written film scores for commercial DVD release by the British Film Institute. As a writer, he has published articles on the philosophy of music, especially issues relating to music & embodiment and the concept of the 'composer' in new music mediated by digital technologies. Nicholas has previously held teaching posts at St Catherine's College, Oxford, Trinity Laban Conservatoire of Music & Dance, London and the University of East Anglia, Norwich. He is currently Director of Music Performance Studies and Senior Lecturer in Music at Anglia Ruskin University, Cambridge, UK. For further information, please visit www.nicholasbrown.co.uk

Walter Benjamin's concept of historical time in Brian Ferneyhough's guitar music

Diego Castro Magas

Most of Brian Ferneyhough's guitar music evidences the trace of Walter Benjamin's thought; namely, the guitar solo Kurze Schatten II (1983-89), the guitar 'concerto' Les Froissements des Ailes de Gabriel (2003) and the guitar duo No Time (at all) (2004). My claim is that a common concern between these pieces revolves around Benjamin's concept of historical time. While Ferneyhough's guitar solo deals with the concept of the allegorical as stated in The Origin of German Tragic Drama —in which Benjamin demands a radical rethinking of the philosophical concept of historical time as methodological tool for art criticism— both the guitar concerto and the guitar duo evoke Benjamin's late conceptions on time and history as stated in Benjamin's On the Concept of History (especially regarding his rather famous interpretation of Paul Klee's picture Angelus Novus as the 'Angel of History').

In this presentation, I explore the trace of Benjamin's concepts on time and history in Ferneyhough's guitar music, and, most importantly, I evaluate their impact upon interpretation and performance practice. Thus, I delineate an approach to performance practice that attempts to allow the presence of the past in the 'making of musical time' by means of focusing on gesture and performer's body. Therefore, this presentation includes examples of live performance in order to illustrate these various levels of correspondance.

Diego Castro Magas was born in Santiago de Chile, in 1978. He started music lessons (guitar performance and music theory) under the guidance of Chilean composer Fernando Carrasco in 1992. Later, he studied guitar performance in Catholic University of Chile with Oscar Ohlsen (Diploma in Guitar performance with summa cum laude in 2000) and in University Ramon Llull with Ricardo Gallén and Fernando Rodríguez (MA in Guitar performance 2005). Currently, he is a PhD student in Contemporary Performance at University of Huddersfield under the supervision of Philip Thomas.

He has also attended masterclasses from other guitarists such as Eduardo Fernández, Pablo Márquez and Magnus Andersson as well as from lutenist Hopkinson Smith.

Between 1998 and 2005, Diego was prize-winner in several classical guitar competitions such as 'Liliana Perez Corey Guitar Contest' in Chile, 'Maestro Abel Carlevaro Guitar Competition' in Uruguay, 'Manuel Ponce Gutar Competition' in Mexico, 'Stotsenberg Classical Gutar Competition' in USA and 'Miquel Llobet Guitar Competition' in Spain.

Since 2006, he has been focused mainly in contemporary music repertoire, introducing to Chilean audiences both solo and chamber music major guitar works by F. Donatoni, L. Francesconi, A. Clementi, G. Manca, H. Lachenmann, B. Ferneyhough, Chris Dench and M. Finnissy among others. Recently, he has collaborated with Brian Ferneyhough, James Dillon, Michael Finnissy, Aaron Cassidy, Bryn Harrison and Clemens Gadenstätter in performances of their solo guitar pieces, respectively.

He has performed in main contemporary and chamber music festivals in Chile, as well as in Festival Atempo in Venezuela, 24th Contemporary Music Festival in Cuba, Festival Ars Nova in Ravensburg, Huddersfield Contemporary Music Festival, Klang Festival in Durham and Tacit or Loud Festival for Artistic Research in Malmö among many others.

His first solo CD was released in 2009, featuring the first published recording of Ferneyhough's guitar duo "No Time (at all)" along side brilliant Chilean guitarist José Antonio Escobar.

He was lecturer in Guitar Performance at Catholic University of Chile between 2006 and 2012.

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