



17-20 MAY 2016  
 TANNA SCHULICH HALL  
 SCHULICH SCHOOL OF MUSIC  
 MCGILL UNIVERSITY  
 MONTRÉAL, QUÉBEC



# MEC 2016

## Music Encoding Conference



**McGill**



Schulich School of Music  
 École de musique Schulich



Centre for Interdisciplinary Research  
 in Music Media and Technology

Fonds de recherche  
 Société et culture

Québec



Social Sciences and Humanities  
 Research Council of Canada

Conseil de recherches en  
 sciences humaines du Canada

Canada

## **Welcome to Montreal / Bienvenue à Montréal!**

It is with great pleasure that we welcome you to the Schulich School of Music of McGill University in Montreal and the fourth Music Encoding Conference! With nearly 70 delegates registered from 10 different countries, including a dozen students, this conference promises to be the largest and most diverse to date.

We are delighted to welcome Julia Flanders and Richard Freedman as our Keynote speakers. We will have 3 Pre-Conference Workshops on Tuesday, 20 papers on Wednesday and Thursday, and a poster session with 11 posters on Wednesday. The reception (with wine chosen by one of the members of the community) is on Tuesday evening, the banquet is on Thursday evening, and Friday is the Un-Conference starting with the MEI Community meeting in the morning where everyone is welcome. Finally, on Friday evening you are all invited to a free lecture-recital featuring Karen Desmond and members of VivaVoce under Peter Schubert's direction.

We love Montreal and hope you will be able to find time to explore the city! Montreal is the second-largest French-speaking city in the world after Paris and over half of the people speak both French and English. You should not have any problems communicating in either language in the city.

We would like to acknowledge the Program Committee members, the reviewers, the MEI Board members, and the Organizing Committee members, who have contributed tremendously in the preparation of this conference. We would also like to acknowledge the general funding support we have received from the Social Sciences and Humanities Council of Canada, le Fonds de recherche du Québec – Société et culture, and the Schulich School of Music of McGill University.

Enjoy!

Andrew Hankinson

Ichiro Fujinaga

**Organizing Committee Co-Chairs**

### **Program Committee:**

Franz Kelnreiter, Mozart-Institut / Digitale Mozart-Edition (Chair)

Richard Chesser, British Library

Eleanor Selfridge-Field, Stanford University

Peter Stadler, Carl-Maria-von-Weber-Gesamtausgabe

Raffaele Vglianti, University of Maryland

### **Organizing Committee:**

Ichiro Fujinaga, Schulich School of Music, McGill University (Co-Chair)

Andrew Hankinson, Schulich School of Music, McGill University (Co-Chair)

Ryan Bannon, Schulich School of Music, McGill University

Karen Desmond, Schulich School of Music, McGill University

Emily Hopkins, Schulich School of Music, McGill University

Audrey Laplante, Université de Montréal

Laura Risk, Schulich School of Music, McGill University

### **MEI Board Members:**

Giuliano Di Bacco, Jacobs School of Music, Indiana University, Bloomington

Benjamin W. Bohl, Musikwissenschaftliches Seminar Detmold / Paderborn

Ichiro Fujinaga, Schulich School of Music, McGill University, Montreal

Axel Teich Geertinger, Danish Centre for Music Publication, The Royal Library, Copenhagen

Johannes Kepper, Musikwissenschaftliches Seminar Detmold / Paderborn (Administrative Chair)

Laurent Pugin, Swiss RISM Project, Bern (Technical Co-Chair)

Kristina Richts, Musikwissenschaftliches Seminar Detmold/Paderborn

Perry Roland, University of Virginia Library, Charlottesville (Technical Co-Chair)

Eleanor Selfridge-Field, Center for Computer-Assisted Research in the Humanities, Stanford University

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### Information Desk

The information desk will be located in the Elizabeth Wirth Music Building Lobby.

8h00-18h00 Tuesday - Thursday

8h30-18h00 Friday

### Anti-harassment Policy

The Music Encoding Conference is dedicated to providing a harassment-free conference experience for everyone, regardless of gender, gender identity and expression, sexual orientation, disability, physical appearance, body size, race, age, or religion. We do not tolerate harassment of conference participants in any form. Sexual language and imagery is not appropriate for any conference venue, including talks. If someone makes you or anyone else feel uncomfortable or unwelcome, please report it as soon as possible to conference staff, either in-person at the information desk, or by phone or email (Emily Hopkins, SIMSSA Project Manager, [emily.hopkins@mcgill.ca](mailto:emily.hopkins@mcgill.ca)). Thank you for helping to make this event a friendly and welcoming space for all!

### Emergency Contact Information

Call 911 for emergencies (police, fire, ambulance)

McGill Security: 514-398-3000

Conference Emergency Contact: Ichiro Fujinaga, [ich@music.mcgill.ca](mailto:ich@music.mcgill.ca)

### Children & Infants at the Conference

The Music Encoding Conference is dedicated to being a family-friendly event, and registered conference attendees may bring their children to events. We also welcome infant feeding on demand in all event venues, including breast and bottle feeding. We have set aside rooms for children and caregivers (C-201) and infant feeding (E-539) that you are welcome to use; please see the information desk for details. Nearby washrooms and change tables are in the Wirth Music Building (A-207 and A-209) and Strathcona Music building (room 118). If you have any questions or concerns, please contact the information desk in the lobby or contact Emily Hopkins ([emily.hopkins@mcgill.ca](mailto:emily.hopkins@mcgill.ca)).

### Tourism, Food & Beer

Please check our website at <http://music-encoding.org/community/conference/> for some of our suggestions for things to see, drink, and eat while you're in Montréal!

**Twitter:** @music-encoding #mec2016

**Guidebook (electronic schedule):** <http://guidebook.com/g/mec>

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**Tuesday, May 17, 2016**  
***Pre-Conference Events***

**Elizabeth Wirth Music Building**  
Library Seminar Rooms, see Information Desk  
Schulich School of Music of McGill University

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- 9h–12h**                    **Workshop Ia**  
*Verovio – current status and future directions*  
Laurent Pugin
- 9h–12h**                    **Workshop IIa**  
*Encoding Music at Music Encoding*  
Jim DeLaHunt
- 9h–12h**                    **Workshop IIIa**  
*Introduction to MEI*  
Perry Roland
- 14h–17h**                  **Workshop Ib**  
*Verovio – current status and future directions*  
Laurent Pugin
- 14h–17h**                  **Workshop IIb**  
*Encoding Music at Music Encoding*  
Jim DeLaHunt
- 14h–17h**                  **Workshop IIIb**  
*Introduction to MEI*  
Perry Roland
- 19h30**                    **Welcome Reception**  
Wirth Lobby

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**Wednesday, May 18, 2016**  
**Conference Day 1**

**Tanna Schulich Hall**

Schulich School of Music of McGill University  
Elizabeth Wirth Music Building

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- 9h00–9h45**      **Keynote I**  
*The Provocation of Music: Evolving Paradigms for Markup*  
Julia Flanders  
*Abstract and Biography, see pg. 8*
- 9h45–10h00**      **Break**
- 10h00–11h00**      **Session Ia**  
Chair: Raffaele Vigiante
- 10h00**              *Prototypical Scenarios for Contextual Navigation with MEI and Linked Data*  
Kevin Page, David Weigl, David Lewis, and Carolin Rindfleisch
- 10h30**              *A Digital Score Library Based on MEI*  
Raphaël Fournier-Sniehotta, Philippe Rigaux, and Nicolas Travers
- 11h00–11h30**      **Break**
- 11h30–12h30**      **Session Ib**  
Chair: Perry Roland
- 11h30**              *An MEI module proposal for hierarchical analysis*  
David Rizo and Alan Marsden
- 12h00**              *XML Music Performance Description*  
Axel Berndt and Benjamin W. Bohl
- 12h30–13h30**      **Lunch**
- 13h30–15h**        **Session II**  
Chair: Eleanor Selfridge-Field
- 13h30**              *Wie? Was? Entsetzen! Lessons learned from the Freischütz Digital project*  
Johannes Kepper and Joachim Iffland
- 14h00**              *The Freischütz debut performance in Vienna: Encoded representation of performance-related modifications of the score*  
Agnes Seipelt



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**Thursday, May 19, 2016**  
**Conference Day II**

**Tanna Schulich Hall**

Schulich School of Music of McGill University  
Elizabeth Wirth Music Building

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**9h00–11h00**

**Session IV**

Chair: Axel Teich Geertinger

**9h00**

*Teaching Digital Music Scholarship through MEI Fellowships*

Matthew Vest, Purdom Lindblad, Jeremy Boggs, and Perry Roland

**9h30**

*An Empty House? Delius, Beecham, and using MEI to inform performance*

Joanna Bullivant

**10h00**

*Chants that Defy Classification: Implications of the Need to Categorize in the Cantus Database*

Debra Suzanne Lacoste and Barbara Swanson

**10h30**

*MerMEId in practice*

Wolfram Albrecht Enßlin and Klaus Rettinghaus

**Elizabeth Wirth Music Building Lobby**

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**11h00–12h30**

**Poster Session**

*Poster Titles, see pg. 12*

**12h30–13h30**

**Lunch**

**Tanna Schulich Hall**

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**13h30–14h30**

**Session V**

Chair: Laurent Pugin

**13h30**

*Hartker's XML: The Optical Neume Recognition Project and MEI*

Katherine Eve Helsen, Jennifer Bain, Andrew Hankinson, Inga Behrendt, and Ichiro Fujinaga

**14h00**

*Encoding Old Hispanic neumes*

Elsa De Luca

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**Thursday, May 19, 2016**  
**Conference Day II**

**Tanna Schulich Hall**  
Schulich School of Music of McGill University  
Elizabeth Wirth Music Building

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**15h00–15h30**     **Break**

**15h30–17h00**     **Session VI**  
Chair: Klaus Rettinghaus

**15h30**             *On Intermediary Formats*  
Reiner Krämer

**16h00**             *Lychee: An Engine for MEI Document Management and Conversion*  
Christopher Antila and Jeffrey Treviño

**16h30**             *Separating Content From Presentation - A New Approach to Encode  
Rendering Hints in LilyPond*  
Urs Liska

**17h00–17h15**     **Break**

**17h15–18h00**     **Keynote II**  
*Music, MEI and the Arts of Quotation*  
Richard Freedman  
*Abstract and Biography, see pg. 9*

**L'Auberge Saint-Gabriel**  
426 Saint-Gabriel  
Old Port, Montréal, QC

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**19h30**             **Banquet Dinner**  
Trudeau Hall

## Keynote I

# The Provocation of Music: Evolving Paradigms for Markup

**Julia Flanders**  
(Northeastern University)

The past thirty years have seen dramatic changes in the documentary cosmology imagined by text markup systems in the humanities. If our Ptolemaic period focused on text as an “ordered hierarchy of content objects” which XML markup conveniently emulates, our Copernican revolution brought into view the multivocality of documents and the challenges of modeling all the things a document can be: a rhetorical event, a narrative, a material object, a system of reference and intertextuality, an information architecture. In some of these views, markup functions mimetically to re-present the document to us through a digital surrogate. In others, markup is constructive, tendentious, performative: it constitutes a new information ecology for the document. As our documentary cosmology expands, the document is shown to participate in widening networks of information entailing markup architectures that extend beyond the boundaries of the document itself. These are challenges that face the markup world generally, but music encoding encounters them in especially potent and compelling forms, and prompts questions about the next stages of markup evolution. Extending the notion of a critical apparatus, can we develop more extensive shared vocabularies in which to express our debates about documents, framed in markup? What are the key components of these debates? What are the advantages and disadvantages for music representation of a grammar-based approach? How much insight do we gain from the constraints of a language like MEI? What alternatives are there? In a decade obsessed with large-scale data, how might the density of detailed musical markup function as another form of scale?

**Julia Flanders** is a Professor of Practice in the English Department at Northeastern University, and Director of the Digital Scholarship Group in the Northeastern University Library. She also serves as the interim co-director of Northeastern’s NULab for Texts, Maps, and Networks.

She directs the *Women Writers Project*, a long-standing research and publication project focused on early modern women’s writing and scholarly uses of text encoding, with special focus on the TEI Guidelines. She co-directs TAPAS (the TEI Archiving, Publishing, and Access Service), which provides long-term data curation and publication services for TEI projects. She also serves as editor in chief of *Digital Humanities Quarterly*, the open-access journal of digital humanities published by the *Alliance of Digital Humanities Organizations*. All of these initiatives include a strong research interest in the role schemas and other constraints play in shaping scholarly communities of practice and interpretation.

With Fotis Jannidis she is currently co-editing a book titled *The Shape of Data in Digital Humanities: Modeling Texts and Text-based Resources*, forthcoming from Routledge, and with Neil Fraistat she co-edited the *Cambridge Companion to Textual Scholarship* (2013). Her research interests include humanities data modeling, digital scholarly editing, and the theorization of work in the digital academy.

## Keynote II

# Music, MEI and the Arts of Quotation

**Richard Freedman**  
(Haverford College)

Musicians have long felt the dual impulses of both honoring and competing with our past—sonic references that betray lineages of prestige and apprenticeship both real and imagined. Indeed, the history of music is littered with borrowings, allusions, and formal modelings that could fill a book (and have), from Machaut's *cantus firmus* motets to the *L'homme armé* Masses of the fifteenth and sixteenth centuries, and from Handel's endless borrowings to the richly historicist allusions of Brahms and the collage of popular genres replayed by Mahler and Ives. From structural tune to parodic allusion, musical traditions are heavily bound up with the citation of sounds and scripts.

Now the digital domain has in recent decades opened still other possibilities that will both enhance and complicate these intellectual and artistic traditions, above all through the separation of the *graphical* presentation of texts from their *logical* basis. Thanks to structured encodings like TEI and MEI a text can be both synoptic (as when a single encoding contains richly encoded information about different versions or manifestations of a single work) and endlessly entwined with the people and institutions that created them. These entities, too, can be encoded in ways that make their roles discoverable across the digital domain.

Music (and digital attempts to represent it) presents still confounding problems for the notion of a quotable text. Standard graphical scores, after all, are not the works themselves, but rather scripts that guide their realization (German terminology helpfully preserves a distinction between "Schrift" and "Ton" that English speakers tend to conflate under the vague heading of "music"). And while the idea of a musical "work" or "masterwork" itself (borrowed as it is from the plastic arts) is perhaps too hoary a concept to settle without the help of aestheticians, the advent of richly encoded digital scores for music invites a number of questions about the *uses* of these texts:

- What is the quotable musical text in the digital age?
- What kind of evidence are these musical texts?
- What kinds of argumentation or exemplification are possible with these digital texts? What kinds of publication are possible in this domain?
- What kinds of linkages or ontologies can we imagine for the various kinds of meta-data that are part of these digital texts? What might these digital objects look like, and how could we imagine using them?

The MEI community is well-positioned to contribute to these processes in important ways, above all helping us to re-imagine music as a quotable text.

**Richard Freedman** is Associate Provost for Curricular Development and John C. Whitehead Professor of Humanities at Haverford College in suburban Philadelphia. His research on French and Italian music of the sixteenth-century in its cultural contexts has appeared in leading scholarly journals, and in two books, *The Chansons of Orlando di Lasso and their Protestant Listeners: Music, Piety, and Print in Sixteenth-Century France* (Rochester, 2001) and *Music in the Renaissance* (W.W. Norton, 2012). Other writings appear in the *New Grove Dictionary of Music and Musicians*, and in the *Oxford Dictionary of the Middle Ages*.

He is director (with Philippe Vendrix of the Centre d'études supérieures de la Renaissance in Tours) of the *The Lost Voices Project*, a digital workshop for the study and reconstruction of Renaissance polyphony. A new project in collaboration with the CESR (co-directed with David Fiala) focuses on the tradition of the imitation Mass, and will develop new models for the citation and annotation of complex musical texts. These projects are supported by major grants from the National Endowment for the Humanities, the American Council of Learned Societies, the Mellon Foundation, the Centre national de la recherche scientifique, and other institutions.

Freedman served as Director of Digital Humanities Initiatives at Haverford, Bryn Mawr, Swarthmore Colleges, and is Digital and Multimedia Scholarship Editor for the *Journal of the American Musicological Society*.

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**Friday, May 20, 2016**  
***Un-Conference Day***

**Elizabeth Wirth Music Building, Rooms A832 and A833**  
Schulich School of Music of McGill University

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**9h00–10h00**      **MEI Community Meeting**

**10h00–16h00**      Self-organized activities running in parallel, including an MEI Hackathon and meeting times for Special Interest Groups

**10h00–16h00**      Metadata Special Interest Group Meeting

**Redpath Hall**

3461, rue McTavish (main campus)  
McGill University

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**19h00–20h30**      **Lecture and Concert**

*2000 Years of Seeing Sounds: The Story of Music Notation*  
Karen Desmond  
with members of VivaVoce and Peter Schubert, director

How do we “see” sound? Digital encoding of music for computers is merely the most recent in a long line of methods for communicating music from one person to another. For centuries the only way people could share music was to transcribe sounds as visual symbols on parchment and paper. The Music Encoding Conference ends in a whirlwind tour of the early methods of “seeing” sound, featuring a lecture by Karen Desmond and musical illustrations by members of VivaVoce, conducted by Peter Schubert.

This live performance and dialogue will explore the earliest forms of notation - which is to say from none at all; to the addition of little mnemonic signs above words; through to the sixteenth-century where our present-day notation had in essence developed. The lecture will illustrate how notation limited what tunes could be written, and at the same time made possible crazy, complicated tunes. The examples will be sung and the notation displayed.

**Karen Desmond** is a musicologist and medievalist whose research focuses on the intellectual and aesthetic experience of music in the thirteenth and fourteenth-centuries. She is currently a Banting Fellow (awarded by the Canadian SSHRC) at the Schulich School of Music of McGill University and will take up a position as Assistant Professor of Music at Brandeis University in July 2016. Her monograph—*Ars nova in Music and Medieval Thought: Making it New, 1300-1350* (under contract with Cambridge University Press)—explores the cultural and intellectual contexts that saw the emergence of new music-theoretical currents in fourteenth-century France. Desmond’s research into music notation employs conceptual models and tools from other disciplines to describe the ways in which music changes over time.

Friday, May 20, 2016  
7:00 p.m.  
REDPATH HALL

## 2000 YEARS OF SEEING SOUNDS: THE STORY OF MUSIC NOTATION

A lecture by **KAREN DESMOND** with musical examples sung by members of

**VIVA VOCE**  
PETER SCHUBERT, director

### P R O G R A M M E

<i>Haec dies</i> (first notated c. 900) plainchant	ANON.
<i>Seikilos Epitaph</i> (c.100)	ANON.
<i>Epithalamica</i> (after 1131) plainchant	attr. PETER ABELARD (1079-1142)
<i>Haec dies</i> , Musica Enchiriadis organum	
<i>Haec dies</i> two-part Notre-Dame Organum	ANON.
<i>Balaam de quo vaticinans</i> (late 13 <sup>th</sup> c.) three-part motet	ANON.
<i>Garrit gallus / In nova fert / Neuma</i> (c. 1317) three-part motet	attr. PHILIPPE DE VITRY (1291-1361)
<i>Ma fin est mon commencement</i> (c. 1360) three-part rondeau	GUILLAUME DE MACHAUT (c. 1300-1377)
<i>Tout par compas</i> (late 14 <sup>th</sup> c.) three-part rondeau	BAUDE CORDIER (d. 1397/8?)
Two Puzzle Canons on <i>Miserere</i> (late 16 <sup>th</sup> c.)	attr. WILLIAM BYRD (c. 1539-1623)
<i>O decus ecclesiae</i> five-part motet	HEINRICH ISAAC (c. 1450-1517)

Each **VivaVoce** concert is a uniquely captivating experience. The award-winning ensemble seduces listeners with virtuosic performances while conductor Peter Schubert provides a “way in” to the music, revealing its secrets with wit and charm. Critics have praised the angelic purity of VivaVoce’s tone in Renaissance motets and the rigor and intensity of their performances of contemporary repertoire. Whether singing Josquin, Brahms, or Berio, VivaVoce embodies the essence of the composer’s intentions.

**Peter Schubert’s** understanding of choral music is informed by his years of study with legendary pedagogue Nadia Boulanger, conducting study with Helmuth Rilling, and doctoral studies in music theory at Columbia University in New York City. A professor of music theory at the Schulich School of Music of McGill University since 1990, Schubert has published two textbooks on counterpoint and numerous articles on Renaissance music. Schubert has an astonishing ability to communicate complex and nuanced ideas about music in a way that charms both musical neophytes and experienced musicians.

## **POSTER SESSION**

**Thursday, May 19, 2016, 11h00–12h30**

*An MEI Score Alignment Application*

Andrew Horwitz, Andrew Hankinson and Ichiro Fujinaga

*Bidirectional Conversion Between MEI and Abjad*

Jeffrey Treviño

*Julius: A Web Interface for Realtime Collaborative and Scriptable MEI Document Editing*

Christopher Antila, Andrew Horwitz, Jeffrey Treviño, Simon Whitmell, and Sienna Wood

*Sources of the Detmold Court Theatre Collection Visualization of combined cataloging and transcription processes using MEI, TEI and the Edirom*

Irmlind Capelle and Kristina Richts

*A musicological edition in a virtual environment: Integrating the Anton Webern Gesamtausgabe in SALSAH*

Stefan Münnich

*A new MEI module for encoding genetical processes*

Maja Hartwig, Richard Saenger, and Johannes Kepper

*Music artificial intelligence use cases as motivation for music encoding design*

Tom Collins and Christian Coulon

*Aggregation and Peer Review for Digital Projects in Music*

Timothy Duguid

*Lessons learned in crowd-sourced encoding of public domain classical music scores*

Jim DeLaHunt

*An MEI-based commercial application: customization and styling*

Zoltán Kőmíves and Alexander Erhard

*MEI and Polona: Confronting Strategies for Encoding Musical Materials in Digital Libraries*

Urszula Horoszko and Sonia Wronkowska

### About the Schulich School of Music

Founded in 1904, the Schulich School of Music of McGill University embodies the highest international standards of excellence in professional training and research. The School is renowned for its programs in orchestra, opera, jazz, early music and contemporary music. Its status as a leader in sound recording and music technology provides unique possibilities for collaboration with the larger musical community. Recognized as one of the major music schools in North America, the Schulich School of Music has more than 850 students, 240 faculty members and top programs in research and technology. It hosts some 700 concerts and events each year.

### Acknowledgements

Many thanks to the following individuals and organizations for their support and assistance: Ana Maria Courrée and Bob Hutchings of *Foodie Traiteur*, Julie Cumming, Serge Filiatrault, Johanne Froncioni, Kate Herzberg, Kennedy Kanyang'onda, Ian Lorenz, Alexandre Parmentier, Jacob Sagrans, Jessica Thompson, Vi-An Tran, Devon Wilkinson and *Assemble Ensemble*, SSHRC, FRQSC, CIRMMT, the Schulich School of Music, and McGill University.

