

Johanna Catriona Devaney

EDUCATION

September 2007-June 2011 <i>PhD in Music, Music Technology area</i> Dissertation advisor: Ichiro Fuginaga. Dissertation readers: Jonathan Wild and Daniel P.W. Ellis.	McGill University	Montréal, QC
October 2010-March 2011 <i>Visiting Student Researcher</i> Worked with David Wessel.	University of California, Berkeley Center for New Music and Audio Technologies	Berkeley, CA
September 2003-February 2007 <i>MPhil in Music, Music Theory area</i> MPhil advisor: Fred Lerdahl.	Columbia University	New York, NY
September 2000 – November 2002 <i>MA in Music, Composition area</i> MA thesis advisor: Michael Coghlan. MA thesis reader: David Lidov.	York University	Toronto, ON
September 1999 – May 2001 <i>Computer Programming Diploma</i>	Seneca College	Toronto, ON
September 1995 – June 1999 <i>BFA Honours in Music and History (Double Major)</i>	York University	Toronto, ON
September 1988-June 2000 <i>Private Piano, Oboe, Theory and Composition Instruction</i> Studied piano and oboe with Senya Trabrushnik and composition with Larysa Kuzmenko.	Royal Conservatory of Music	Toronto, ON

EMPLOYMENT HISTORY

July 2011-present <i>Postdoctoral Scholar</i> <ul style="list-style-type: none">Working with David Wessel on perceptual issues related to music performance analysis.	University of California, Berkeley Center for New Music and Audio Technologies	Berkeley, CA
March 2009-August 2010 <i>Musical Advisor</i> <ul style="list-style-type: none">Provide expertise on music analysis and classification for this music recommendation start-up.	Musically Intelligent Machines	Montréal, QC
June 2008-July 2009 <i>Instructor, Pre-College Program</i> <ul style="list-style-type: none"><i>Sounding Off: Music and Counterculture in NYC</i> (Summer 2008, 2009)	Barnard College, Columbia University	New York, NY
September 2007-June 2011 <i>Research Assistant for FQRSC Research-Creation Project</i> (April 2008 – June 2011) <ul style="list-style-type: none">Participated in the writing and execution of a 3-year, \$145,000, grant to work on digital recreations and a method for training singers in the tuning system of Nicola Vicentino, a sixteenth century theorist and composer. <i>Teaching Assistant</i> <ul style="list-style-type: none">MUTH 475 <i>Philosophy and Aesthetics of Music Production</i> (Winter 2008) <i>Research Assistant for Gamut of Early Music on Microfilms (GEMM) project</i> (Sept. 2007 - April 2008) <ul style="list-style-type: none">Worked on a C and Matlab-based solution for ‘bleed through’ issues in scanned music. <i>Instructor</i> <ul style="list-style-type: none">MUGT 301 Technology and Media for Music Educators (Fall 2007)	Schulich School of Music, McGill University	Montréal, QC
October 2004-June 2007 <i>Executive Director</i> <ul style="list-style-type: none">Duties included organisational set-up, day to day running, and webpage design/maintenance.	International Music Software Trade Association	Toronto, ON

Johanna Catriona Devaney

September 2004–May 2006 Department of Music, Columbia University New York, NY
Teaching Fellow

- Instructor for *Music Humanities* (Fall 2005, Winter 2006)
- Grader for *Jazz* (Winter 2005)
- Teaching assistant for *Music Humanities* (Fall 2004)

September 1999–June 2006 Department of Music, York University Toronto, ON
Course Director - Contract Faculty

- MUSI 3204 3.0 *History of Music Theory II: Rameau – Schoenberg* (SU 2006)
- MUSI 4151 6.0 *Computer Music* (SU 2006)
- MUSI 1530 6.0 *Rock and Popular Music* (SU 2005)
- MUSI 3210 6.0 *An Introduction to Sonic Architecture and Design* (SU 2003, SU 2004, SU 2005)
- MUSI 2202 3.0 *Harmony* (W 2003)
- MUSI 3120 6.0 *Songwriting and Repertoire* (W 2003)
- MUSI 3310 6.0 *Music in the Modern Era* (F/W 2002-03)
- MUSI 3450 3.0 *Creative Applications of MIDI* (F 2002)
- FA/MUSI 1140 6.0 *Introduction to Electronic and Digital Media* (F/W 2001-02, F/W 2002-03)
- MUSI 3450 3.0 *Pedagogical Applications of Music Software* (W 2001, SU 2003, SU 2004)
- MUSI 3220 3.0 *Intro. to Temperament, Alternate Tunings and Microtonal Tuning Systems Using Computers and Synthesizers* (W 2000)
- MUSI 3460 3.0 *Music Engraving and Notation Using Computers* (F 1999, F 2000, F 2001, SU 2002, SU 2003, SU 2004, SU 2005)

Computer Lab Monitor (September 1998- December 2001)

- Lab monitor of both a MIDI computer lab and a digital audio and synthesizer lab. Demonstrating and instructing; a number of computer software programs on both Mac and PC, including *Cubase*, *Finale*, *Reason*, *Reaktor*; recording equipment; and synthesizers, both hardware and software.

October 1997 – June 2006 Ottaviano Scoring and Design Thornhill, ON
Music Score Copyist -- Contract Based (October 1997-June 2006)
Web Page Design -- Contract Based (July 1997-August 2003)

- Select clients: be-cool.org (2002-3), Music Marketing (2002-3), Steinberg Canada (2000-3) and Jester Promotions and Productions (1997-9).

June 1997-June 2000 Roy Music Centre Thornhill, ON
Piano Teacher

- One-on-one instruction of pupils ranging in age from pre-school to adult.

November 1993-April 2003 HMV Thornhill, ON
Part-time Keyholder

- Responsible for opening and closing procedures, cash handling, buying for classical and indie music sections, shipping and receiving, and customer service.

RESEARCH CONTRIBUTIONS

JOURNAL ARTICLES

- Devaney, J. 2011. A study of solo vocal intonation and its relationship to musical context. *Music Theory Online*. (Submitted for Review)
- Devaney, J., M.I. Mandel, D.P.W. Ellis, and I. Fujinaga. 2011. Automatically extracting performance data from recordings of trained singers. *Psychomusicology*. 21 (1): In Press.
- Devaney, J. and D.P.W. Ellis. 2008. An empirical approach to studying intonation tendencies in polyphonic vocal performances. *Journal of Interdisciplinary Music Studies*. 2 (1-2): 141–56.
- Devaney, J. 2003. Some elements of structure in Elliott Carter's "Insomnia" from *A Mirror on Which to Dwell*. *Ex Tempore*. 11 (2): 85–99.

CONFERENCE PROCEEDINGS (* INDICATES REFEREED PROCEEDINGS PAPER)

- *Devaney, J., M. I. Mandel, and I. Fujinaga. 2011. Characterizing Singing Voice Fundamental Frequency Trajectories. In *Proceedings of the 2011 Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA)*. 73–6
- Devaney, J., J. Wild, and I. Fujinaga. 2011. Intonation in solo vocal performance: A study of semitone and whole tone tuning in undergraduate and professional sopranos. In *Proceedings of the International Symposium on Performance Science (ISPS)*. 219–24.
- *Burgoyne, J.A., Y. Ouyang, T. Himmelman, J. Devaney, L. Pugin, and I. Fujinaga. 2009. Lyric extraction and recognition on digital images of early music sources. In *Proceedings of the 2009 International Society on Music Information Retrieval Conference (ISMIR)*. 723–7.
- *Devaney, J., M.I. Mandel, and D.P.W. Ellis. 2009. Improving MIDI-audio alignment with acoustic features. In *Proceedings of the 2009 Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA)*. 45–48.
- *Devaney, J. and D.P.W. Ellis. 2009. Handling asynchrony in audio-score alignment. In *Proceedings of the 2009 International Computer Music Conference (ICMC)*. 29–32.
- *Burgoyne, J.A., J. Devaney, L. Pugin, and I. Fujinaga. 2008. Enhanced bleed-through correction for early music documents. In *Proceedings of the 2008 International Conference on Music Information Retrieval (ISMIR)*. 407–12.
- Devaney, J. and D. P. W. Ellis. 2007. An empirical approach to studying intonation tendencies in choral performances. In *Proceedings of the 2007 Conference on Interdisciplinary Musicology (CIM)*.
- Devaney, J. 2006. A methodology for the study and modeling of choral intonation practices. In *Proceedings of the 2006 International Conference on Music Perception and Cognition (ICMPC)*.
- *Devaney, J. 2003. An algorithmic approach to composing for flexible intonation ensembles. In *Proceedings of the 2003 International Computer Music Conference (ICMC)*. 215-7.
- *Devaney, J. 2003. Reasonable influences: The advantages and obstacles encountered with commercial software. In *Proceedings of the 2003 International Computer Music Conference (ICMC)*. 299–300.

CONFERENCE PAPER AND POSTER PRESENTATIONS (ALL REFEREED ABSTRACTS)

- Devaney, J., J. Wild, P. Schubert, and I. Fujinaga. 2011. A study of intonation tendencies in a professional SATB ensemble. Paper presented at the *Conference on Interdisciplinary Musicology: Performance*.
- Devaney, J., J. Wild, P. Schubert, and I. Fujinaga. 2011. How do Singers Tune? Paper presented at the *Society of Music Perception and Cognition conference*.
- Devaney, J. and I. Fujinaga. 2010. AMPACT: Automatic Music Performance Analysis Toolkit. Poster presented at the annual meeting of the *Society of Music Theory*.
- Devaney, J., J. Wild, P. Schubert, and I. Fujinaga. 2010. Exploring the relationship between voice leading, harmony, and intonation in a cappella SATB vocal ensembles. Paper presented at the *International Conference on Music Perception and Cognition*.
- Devaney, J., J. Wild, P. Schubert, and I. Fujinaga 2010. Horizontal and vertical intonation tendencies in SATB ensembles. Paper presented at the fifth conference on the *Physiology and Acoustics of Singing*.
- Devaney, J., J. Wild, P. Schubert, and I. Fujinaga. 2010. What can expressive performance studies tell us about the organization of musical materials? Poster presented at the *Indiana University Symposium of Research in Music Theory: "This is your brain on music"*.
- Devaney, J., J. Wild, and I. Fujinaga. 2009. Intonation tendencies in solo a cappella performances. Poster presented at the 2009 *Society for Music Perception and Cognition*.
- Devaney, J. 2009. Intonation tendencies in solo a cappella performances. Paper presented at the *Indiana University Symposium of Research in Music Theory: Special Symposium on Performance and Analysis*.
- Devaney, J. and J. Wild. 2009. Empirical, historical and speculative approaches to intonation. Paper presented at the fourth conference on the *Physiology and Acoustics of Singing*.
- Devaney, J., I. Fujinaga, and D.P.W. Ellis. 2008. Intonation tendencies in polyphonic vocal ensembles. Paper presented at the *Digital Music Research Network Workshop (DMRN+3)*.
- Devaney, J. 2008. "Tonality's gravitational pull": Intonation as an empirical measure of melodic attraction. Paper presented at the annual meeting of the *Society of Music Theory*.
- Devaney, J. and I. Fujinaga. 2008. Assessing the role of sensory consonance in trained musicians' tuning preferences. Poster presented at the *International Conference on Music Perception and Cognition*.
- Devaney, J. 2008. The potential of recordings in testing quantitative aspects of music theories. Paper presented at the annual meeting of the *Canadian University Music Society*.

Johanna Catriona Devaney

- Devaney, J. 2008. "Tonality's gravitational pull": Intonation as an empirical measure of melodic attraction. Paper presented at the 2008 *McGill Music Student Symposium*.
- Devaney, J. 2006. Reflections on the application of empirical methodologies on the study of expressive elements in performance. Paper presented at the annual meeting of the *Canadian University Music Society*.
- Devaney, J. 2000. Music as propaganda: The function and style of civic music in late Renaissance Venice. Paper presented at the annual meeting of the *Canadian University Music Society*.

BOOK REVIEWS

- Devaney, J. 2005. Review of *Empirical Musicology* by E. Clarke and N. Cook (Eds.) *Current Musicology*. 79/80: 271–82.

RESEARCH PAPERS

- Devaney, J. 2005. Pitch spelling: Towards a more holistic generalized spelling algorithm. MA Paper. Columbia University.
- Devaney, J. 2002. Sound objects: Approaches to composition in an object-oriented paradigm. MA Thesis. York University.
- Devaney, J. 1999. Music as propaganda: The style and function of civic music in late Renaissance Venice. BA Honours Thesis. York University.

INVITED TALKS AND OTHER RESEARCH ACTIVITY

- Devaney, J. 2011. Consonance and Dissocnace. Invited participant at roundtable at the *Conference on Interdisciplinary Musicology: Performance*.
- Devaney, J., J. Wild, P. Schubert, and I. Fujinaga. 2010. Intonation in SATB vocal ensembles. Talk at *AIRS 2nd Annual Meeting*.
- Devaney, J. 2010. Empirical evaluation of intonation practices in singers and their relationship to musical context. Talk at *Northeast Music Cognition Group*.
- Devaney, J. 2009. Techniques for extracting performance data from audio recordings. Talk at *Symposium on Empirical Methods for Music Theorists*.
- Devaney, J. 2009. Automatic extraction of performance data from recordings. Invited talk at *NYU Music Technology Colloquium*.
- Devaney, J. 2009. An overview of empirical performance analysis. Talk at the *CIRMMT Workshop on Expressive Performance*.
- Devaney, J. 2009. Expressive performance. Guest lecture in *MUMT 621: Music Information Acquisition, Preservation, and Retrieval*, McGill University.
- Devaney, J. 2006. Choral intonation practices: an investigation and a model. Student presentation at the *2006 International Summer School in Systematic Musicology*.
- Devaney, J. 2006. Intonation and expression: a study and model of choral intonation practices. Student presentation at the *2006 S2S² Summer School in Sound and Music Computing*.
- Devaney, J. 2002. Realizing temperaments: The recreation of historical tuning systems with commercial software. Talk for the *Computer and Music Reading Group*, University of Toronto.

SPECIAL SESSION AND SYMPOSIA ORGANIZATION

- Devaney, J. and P. Martens. 2009. *Post-SMT Symposium on Empirical Methods for Music Theorists*.
- Devaney, J. and M. Valieres. 2009. *Listening through time: Psychological and music-theoretical perspectives on the temporal dynamics of listening*. Special session at *Society of Music Theory* annual meeting.
- Devaney, J. and D. Eck. 2009. *CIRMMT Workshop on Expressive Performance*.

COMPOSITIONS

- Tango* (2005) for String Quartet. Commissioned arrangement of David Lidov's *Tango* (1985) for Piano.
- Happiness on a Spring* (2004) for Violin and Live Electronics (Max/MSP + Jitter). Premiered at Columbia Computer Music Center Concert, The Tank, New York, NY (January 31, 2004).
- Partial Objects* (2002) for String Quartet. Premiered at the Madawaska String Quartet Workshop, Music Gallery, Toronto, ON (November 2, 2002).
- Fiscal Decisions* (2002) for Tape. Premiered at The Money Project Off-ICMC Concert, Gutenberg, Sweden (September 2002). Released on a compilation by Codemist Ltd. Records (ALTA 04 CD).
- Reajet* (2002) for Tape.
- Pure Gong - :GONGNOG:* (2002) for Piano and Tape. Music Gallery, Toronto (March 19, 2002).
- deMusica* (2001) for 12-part Vocal Ensemble.

Johanna Catriona Devaney

Pure Gong - Live Gong (2001) for Gong and Live Electronics (PD). Premiered at York University Department of Music Concert, Dacary Hall, Toronto, ON (November 21, 2001).
John Cage's 4'33 Remixed (2001) for Piano and Live Electronics (PD). Premiered at York University Department of Music Concert, Dacary Hall, Toronto, ON (October 17, 2001).
Door Vinaigrettes (2001) for Tape. Premiered at The Door Project Off-ICMC, Havana, Cuba (September 22, 2001). Released on a compilation by Codemist Ltd. Records (Alta 02 CD).
Desert Whispers (2000) for Voice and Piano. Commissioned by Karen Stanworth.

PROFESSIONAL SERVICES

Chair, Society for Music Theory Music Informatics Interest Group (2011–present)
 Reviewer for IEEE Workshop on Applications on Signal Processing to Acoustics and Audio (2011)
 Professional Development Committee, Society for Music Theory (2010–present)
 Listserv manager for the Society of Math and Computing in Music discussion list (2009–present)
 Reviewer for the International Conference on Music Information Retrieval (2009, 2010, 2011)
 Equity Commissioner, Post-Graduate Students' Society, McGill University (2009–10)
 Joint Senate-Board Committee on Equity, McGill University (2009–10)
 Music Graduate Student Symposium Organizing Committee, McGill University (2009–2010)
 Music Technology Colloquium Coordinator, McGill University (2008–9)
 Student Representative to the Board, CIRMMT (2008–9)
 Committee on Student Grievances, McGill University (2008–9)
 Graduate Student & Postdoctoral Employment Committee, McGill University (2008–9)
 Harassment Policy Review Committee, McGill University (2008–9)
 Reviewer for the Student Conference in Systematic Musicology (2008, 2011)
 Program Committee for the CIRMMT Student Symposium (2008, 2009)
 Carrie M. Derick Award for Excellence in Graduate Supervision & Teaching Cttee., McGill (2008)
 Honorary Degrees and Convocations Committee, McGill University (2008)
 Music Information Archiving and Retrieval Axis Student Coordinator, CIRMMT (2007–8)
 Post-Graduate Students' Society Councilor, McGill University (2007–8)
 Music Graduate Students' Society Representative, McGill University (2007–8)
 Information Systems and Technology Committee, Schulich School of Music, McGill (2007–8)
 Music Theory Area student representative, Columbia University (2005–6)
 Music Department representative on Graduate Student Advisory Council, Columbia (2005)
 Technologically Enhanced Learning round table, Faculty of Fine Arts, York University (2002–3)
 Communications Officer, CUPE Local 3903 (2002–3)
 Faculty of Fine Arts Committee on Arts and Technology, York University (2002–3)
 Organizing Committee for International Women's Day Rally, Toronto (2002)
 Senate Committee on Technological Accommodation Working Group, York University (2001–3)
 Senate Committee on Academic Computing and Library Senate Committee, York (2001–2)

AWARDS AND FELLOWSHIPS

SSHRC Postdoctoral Fellowship (2011–13) - \$38,000 CDN/yr + \$5,000 CDN research budget
 CIRMMT Inter-Centre Research Exchange Funding (2010–11) - \$4,000 CDN
 SEMPRES Travel Award (2010) - \$250 US
 FQRSC Student Research Stipend (2008–11) - \$7,500/yr CDN
 Joseph-Armand Bombardier Canadian Graduate Scholarship (2008–11) - \$35,000/yr CDN
 Schulich School of Music Travel Awards (2009–10) - \$500 CDN (2009), \$400 CDN (2010)
 CIRMMT Travel Awards (2008–10) - \$500 CDN (2008), \$500 CDN (2009), \$1000 CDN (2010)
 CIRMMT Student Award (2008–9) - \$1,000 CDN
 McGill Alma Mater Travel Awards (2008) - \$750 CDN
 McGill University Schulich Scholarship (2007–8) - \$10,000 CDN
 Columbia University GSAS Summer Fellowship (2006) - \$3,500 US
 Columbia University Teaching with Technology Fellowship (2005–6) - \$2,500 US
 Columbia University GSAS Faculty Fellowship - \$30,332 (2003) \$50,346 (2004) \$34,724 (2005)
 Ontario Graduate Scholarship (2001–2) - \$12,000 CDN (2000–1) and \$15,000 CDN (2001–2)
 York University Graduate Entrance Scholarship (2000–1) - \$3,000 CDN
 York University Dean of Fine Arts Commission for Composition (2000) - \$500 CDN
 York University Undergraduate Continuing Scholarship (1997–8) - \$1,000 CDN

Forsters Insurance Company Undergraduate Scholarship (1995–9) - \$1,000/yr CDN
 York University Undergraduate Entrance Scholarship (1995–6) - \$1,500 CDN

SYMPOSIA AND WORKSHOPS ATTENDED

June 2011 - Workshop on Continuous Response Data Analysis at CIRMMT in Montréal, QC
 April 2011 - Workshop on rhythm in speech and music at CIRMMT in Montréal, QC
 May 2010 - Workshop on Design of Behavioral Experiments for Non-Psychologists at CIRMMT in Montréal, QC
 May 2010 - Workshop on Mixed Models at McGill University in Montréal, QC
 April 2010 - Workshop on Psychophysiological Measurement at CIRMMT in Montréal, QC
 March 2010 - Psychoacoustics workshop with Andrew Oxenham at BRAMS in Montréal, QC
 February 2010 – Northeast Music Cognition Group meeting in New York, NY
 January 2010 – North Eastern Music Information Special Interest Group meeting in New York, NY
 January 2010 - Workshop on How Musical Training Changes Cognitive Function at CIRMMT, McGill University in Montréal, QC
 April 2009 - New England Conference on Music Theory's Student Workshop on Performance/Analysis in New Haven, CT
 January 2009 – Workshop on Voice: Acoustics, Physiology and Pedagogy in Montréal, QC
 November 2008 - Workshop on Music and Machine Learning at BRAMS, Université de Montréal in Montréal, QC
 May 2008 – Schoenberg Symposium in Montréal, QC
 February 2008 - Musical Information Archiving and Retrieval Workshop at CIRMMT, McGill University in Montréal, QC
 January 2008 – North Eastern Music Information Special Interest Group in New York, NY
 October 2006 – Meyerfest: Celebration of Leonard Meyer's *Emotion and Meaning in Music* in Evanston, IL
 August 2006 – Summer School in Systematic Musicology in Ghent, Belgium
 August 2006 – International Conference on Music Perception and Cognition in Bologna, Italy
 July 2006 – Summer School in Sound and Music Computing in Barcelona, Spain
 March 2006 – Music and Mind Roundtable in New York, NY
 August 2002 – Beyond Noise at CREATE, UCSB in Santa Barbara, CA
 July 2002 – SuperCollider/Multimedia workshop at CREATE, UCSB in Santa Barbara, CA
 May 2002 – AES Seminar “Digital Post-Production - *Digital by Necessity*” in Toronto, ON
 July/August 2001 – LinuxSound Workshop (PD and CLM) at CCRMA in Stanford, CA
 May 2000 – AES Seminar “Measurements in Audio and Acoustics - *From Ear to There*” in Toronto, ON

SOCIETY MEMBERSHIPS AND RESEARCH AFFILIATIONS

Advancing Interdisciplinary Research in Singing (AIRS)
 American Musicological Society (AMS)
 Canadian University Music Society (CUMS)
 Center for New Music and Audio Technologies (CNMAT)
 International Computer Music Association (ICMA)
 Institute of Electrical and Electronics Engineers (IEEE)
 Society for Math and Computing in Music (SMCM)
 Society for Music Perception and Cognition (SMPC)
 Society for Music Theory (SMT)

LANGUAGE FLUENCY

English – Native
 French – Intermediate Reading, Speaking, and Writing: Completed DELF A1-A4

CITIZENSHIP

Canadian and British Citizen
 United States Permanent Resident