

Daniel T. Shanahan

CONTACT INFORMATION

106 Perry Drive.
Charlottesville, VA 22902
www.danielshanahan.net

Mobile: (614) 940-2560
E-mail: dts9h@virginia.edu

RESEARCH INTERESTS

Musical Style Change, Computational Music Analysis, Digital Humanities, Music Cognition, Claude Debussy, Early 20th-Century Piano Music, Jazz Analysis, The History of Music Theory

CURRENT EMPLOYMENT

The University of Virginia, Charlottesville, VA 2013–present
Lecturer in Critical and Comparative Studies

- Currently teaching 19th Century Music History, Music Theory I, and Music Theory III. Next semester, I will be teaching a graduate seminar in Music Cognition and a course on the analysis of Debussy's piano music.

PREVIOUS EMPLOYMENT

Ohio State University Columbus, OH 2011–2013
Post-Doctoral Research Fellow, Cognitive and Systematic Musicology Laboratory

- Worked with David Huron on numerous projects, ranging from empirical and computational musicology to behavioral experiments. While at Ohio State, I organized a regional music cognition conference, and began work as managing editor of *Empirical Musicology Review*.

University of Dublin, Trinity College Dublin, Ireland 2006–2011
Lecturer (Part-Time)

- Taught Baroque Music History, Jazz Analysis, Music Cognition, Harmony and Counterpoint, and Music Technology.

EDUCATION

The University of Dublin, Trinity College, Dublin, Ireland
Ph.D. in Music

Thesis submitted in October, 2010, Degree conferred in 2011.

Dissertation Title: “Debussy’s Forms of Deception: Toward a Theory of Implication, Attraction, and Tension in the *Préludes*”

Adviser: Dr. Simon J. Trezise

External Examiner: Dr. Steven Rings, University of Chicago

Area of Study: Computational Music Analysis, Music Cognition, Psychological Approaches to Music Theory

Berklee College of Music, Boston Massachusetts (USA)

B.Mus., Jazz Composition, May, 2005

Specialities in Music Theory, Improvisation, and Jazz Performance

TEACHING
EXPERIENCE

Lecturer 2013–Present
McIntire Department of Music, The University of Virginia

Spring Semester, 2014 (January–May)

MUSI7509: Topics in Music Cognition

This graduate seminar will cover the basic topics in Music Cognition, and is cross-listed between the Music and the Psychology departments.

MUSI4520: The Piano Prelude from Chopin to Debussy

This course for upper-level undergraduates will explore the repertoire with a fair amount of depth, will provide the student with the tools necessary for engaging with music that frequently eludes analytical and theoretical discussion.

MUSI3310: Music Theory I

This class begins with the introduction of basic concepts such as consonance and dissonance, and ends with basic part-writing.

Autumn Semester, 2014 (August–December)

MUSI4331: Music Theory III

This course covers *Formenlehre*, chromaticism, and the analysis of late-19th century music.

Text Used: William Caplin, *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven*

MUSI3310: Music Theory I

See description for Spring, 2013.

MUSI3030: 19th Century Music History

This course provides students the tools needed to engage with the music of Beethoven's "heroic" period, Italian opera, Wagner, Brahms, Liszt, Schumann, Chopin, and many others, as well as the scholarly writing surrounding this period.

Text Used: Richard Taruskin, *The Oxford History of Western Music, Vol.III*

Lecturer (Part-Time)

2006–2011

Department of Music, University of Dublin, Trinity College

Spring Semester, 2011 (January–May)

Harmony I

This course covered applied dominants, modulations, and the incorporation of augmented sixth chords, and built upon the topics covered in the previous term.

Text Used: Steven Laitz, *The Complete Musician*.

The History and Analysis of Jazz

This course discussed the evolution of jazz through the analysis of the music. I designed this course myself, and it was aimed at third and fourth-year undergraduates.

Music History I

This course, which built upon material covered in the previous term, discussed many idioms within Baroque music, such as keyboard music, antiphonal sacred music, and the oratorio.

Texts used: David Schulenberg, *Music of the Baroque* and Manfred Bukofzer, *Music in the Baroque Era: From Monteverdi to Bach*

Autumn Semester, 2010 (September–December)

Harmony I

This course introduced figured bass fundamentals and four-part chorale writing.

Text Used: Steven Laitz, *The Complete Musician*.

Introduction to Music Cognition

I created this course and designed the syllabus, which was geared toward third and fourth-year undergraduates. Topics covered included musical expectation, the anatomy of the ear, consonance and dissonance, and the evolutionary role of music.

Music History I

This course covered the transition from late Renaissance to early Baroque music, and focused specifically on early opera.

Texts used: David Schulenberg, *Music of the Baroque* and Manfred Bukofzer, *Music in the Baroque Era: From Monteverdi to Bach*

Spring Semester, 2010 (January–May)

Rudiments and Counterpoint

This course, which built upon work from the previous term, introduced third and fourth species counterpoint, as well as the transposition of orchestral instruments to first-year undergraduate students.

Text Used: Steven Laitz, *The Complete Musician*.

Music Technology I

This course introduced Sibelius notation software and the principles of audio to first-year undergraduate students.

Music History I

See description of Spring Semester, 2011

Music History II

This course covered programmatic symphonic music in the 19th century, as well as Romantic piano music.

Texts used: Carl Dahlhaus, *Nineteenth-Century Music*

Autumn Semester, 2009 (September–December)

Music Technology I

Introduced the concepts of MIDI, sequencers, and Digital Audio Workstations to first year undergraduates.

Rudiments and Counterpoint

Introduced first and second species counterpoint to first year undergraduates, as well as the basics of musical notation.

Text Used: Steven Laitz, *The Complete Musician*.

Music History I

See description of Autumn Semester, 2010

Music History II

This course discussed symphonic music in the Classical era, from C.P.E. Bach to Mozart's late works.

Texts used: Charles Rosen, *Sonata Forms*

Spring Semester, 2009 (January–May)

Music Technology I

This course introduced Sibelius notation software and the principles of audio to first-year undergraduate students.

Music History I

See description of Spring Semester, 2011

Autumn Semester, 2008 (September–December)

Music History I

See description of Autumn Semester, 2010

Music History II

This course discussed symphonic music in the Classical era, from C.P.E. Bach to Mozart's late works.

Texts used: Charles Rosen *Sonata Forms*

Spring Semester, 2008 (January–May)

Music History I

See description of Spring Semester, 2011

Methodologies for Music Analysis

This course covered Schenkerian analysis, set-theoretical concepts, and the analysis of rhythm and meter.

Autumn Semester, 2007 (September–December)

Music History I

See description of Autumn Semester, 2010

Spring Semester, 2006 (January–May)

The History and Analysis of Jazz

See description of Spring Semester, 2011

ADVISING

Honors Musicology Theses Supervised

R. Kearns, 'Tarrega's Chopin Transcriptions and Their Influence on his Compositional Style', (2011). (Junior Sophister Dissertation in Musicology)

A. Kavanagh, 'Square Sounds: Stylistic Approaches and Limitations in Video Game Music: A Study into Works by Yasunori Mitsuda and Nobuo Uematsu', (2011). (Junior Sophister Dissertation in Musicology/Technology)

N.Sweeney, 'The Evolution of European Jazz in the Late 20th-Century', (2009). (Junior Sophister Dissertation in Musicology)

Publications

BOOKS

D. Huron and **D. Shanahan**, *An Ear for Music: An Introduction to Music Cognition* [In preparation].

I am currently co-authoring an introductory music cognition with textbook, which we are hoping to publish with MIT Press.

BOOK

CONTRIBUTIONS

D. Shanahan, 'Improvisational Approaches to Music Therapy and Music Education' in *Exploring New Frontiers in Music Psychology and Music Education Research*, A. Ockelford and Graham Welch (eds.), London: Ashgate [In preparation].

H. White and B. Boydell (eds), *Encyclopaedia of Music in Ireland*, (2013). (Dublin, Ireland: University College Dublin Press).

I have authored more than a dozen entries for this encyclopaedia, which is the most comprehensive work focusing on music in Ireland. My entries have included a number of jazz, popular, and traditional artists.

UNDER REVIEW

D. Shanahan and D. Huron, 'Heroes and Villains: The Relationship Between Pitch Tessitura and Sociability of Operatic Characters,' *Empirical Musicology Review*, [Currently under review].

IN PRESS

D. Huron, N. Anderson, and **D. Shanahan**, 'You Can't Play a Sad Song on The Banjo: Acoustic Factors in the Judgment of Instrument Capacity to Convey Sadness,' *Empirical Musicology Review*, [Forthcoming, accepted December 12th, 2012]

ARTICLES

J. Albrecht and **D. Shanahan**, (2013). 'The Use of Large Corpora to Train a New Type of Key-Finding Algorithm: An Improved Treatment of the Minor Mode,' *Music Perception*, Vol.31, No.1, pp.59–67

Y. Broze and _____, (2013). 'A Diachronic Corpus Study of Jazz Harmony: A Cognitive Perspective,' *Music Perception*, Vol. 31, No.1, pp.32–45.

D. Huron and _____, (2012). 'Eyebrow Movements Influence Vocal Pitch Height: Evidence Consistent with an Ethological Signal,' *Journal of the Acoustical Society of America*, Volume 133(5) 2947–2952.

_____ and D. Huron, (2011). 'Interval Size and Phrase Position: A Comparison between German and Chinese Folksongs,' *Empirical Musicology Review* Vol.6, No.4, pp.187–197.

PUBLISHED PROCEEDINGS

D. Shanahan and Y. Broze, (2012). 'A Diachronic Analysis of Harmonic Schemata in Jazz,' *Proceedings of the 12th International Conference of Music Perception and Cognition*, Thessaloniki, Greece. pp.909–917.

_____ and D. Huron, (2012). 'Interval Size and Phrase Position: A Cross-Cultural Comparison,' *Proceedings of the 12th International Conference of Music Perception and Cognition*, Thessaloniki, Greece. pp.918–924.

_____ (2010) 'Probability and Debussy's *Préludes*: The Nature of Expectancy in "Bruyeres"' in *Musiktheorie als interdisziplinäres Fach (Music Theory and Interdisciplinarity*, 8th Congress of the Gesellschaft für Musiktheorie Graz 2008) Christian Utz (ed.), (Saarbrücken (Germany): PFAU-Verlag), pp.613–628.

REVIEWS AND REVIEW ARTICLES

D. Shanahan, (2010). 'Quantifying Musical Expectation: Reviews of *Music and Probability* by David Temperley, and *Sweet Anticipation: Music and the Psychology of Expectation* by David Huron,' *Theory and Practice* Vol. 34, pp.173–188.

_____, (2009). 'Review of *Music, Language and the Brain* by Aniruddh D. Patel', *Music Theory Online* Volume 15.5.

_____, (2009). Review of *Debussy and the Fractal* by Linda Cummins, *Journal for the Society for Musicology in Ireland* Vol. 4, pp.19–22.

ARTICLES IN PREPARATION

D. Shanahan and J. Devaney, 'Learning by Example: Computationally Modeling the Labeling of Tonic, Predominant, and Dominant Functions in the Phrase Model Defined in Pedagogical Texts'

_____ and K. Nisula, 'The Role of Sound-Size Symbolism in the Perception of Visual Stimuli'.

_____, 'Debussy and Formal Habituation: A New Approach to Structure in the Composer's Late Works'

_____, E. Allen, and T. Schaefer, 'The Role of Urban Environments and Population Density on Listening Preferences'

Conference Presentations, Posters, and Invited Talks

SCHEDULED PRESENTATIONS AND TALKS

D. Shanahan and E. Allen, 'Using Big Data to Examine the Effect of Environment on Listening Habits' Society for Ethnomusicology 58th Annual Meeting, Indianapolis, Indiana (November 14–17, 2013).

_____, 'A New Key-Finding Algorithm based on Euclidean Distance', Presentation for the Music Cognition Interest Group at the Society for Music Theory Annual Meeting, Charlotte North Carolina (October 31–November 2, 2013). [Invited]

_____, 'Learning by Example: Computationally Modeling the Labeling of Tonic, Predominant, and Dominant Functions in the Phrase Model Defined in Pedagogical Texts', Presentation for the Music Informatics Interest Group at the Society for Music Theory Annual Meeting, Charlotte North Carolina (October 31–November 2, 2013). [Invited]

PRESENTATIONS

D. Shanahan, 'Methodological Issues in Sound-Size Symbolism Research', Presentation for

the Kubovy Perception Lab, University of Virginia Department of Psychology (October 9, 2013). [Invited]

_____ and J. Albrecht, 'The Acquisition and Validation of Large Web-Based Corpora', Conference for the Society for Music Perception and Cognition, Toronto, Canada (August 8–11, 2013).

J. Albrecht and _____, 'Name that tonic: A new key-finding algorithm using Euclidean distance', Conference for the Society for Music Perception and Cognition, Toronto, Canada (August 8–11, 2013).

K. Nisula and _____, 'The Role of Sound-Size Symbolism in Tone Perception', Conference for the Society for Music Perception and Cognition, Toronto, Canada (August 8–11, 2013).

_____ and E. Allen, 'A Tale of Forty Cities: The Effect of Population Density on Preferred Tempo', Conference for the Society for Music Perception and Cognition, Toronto, Canada (August 8–11, 2013).

_____ and K. Nisula, 'The Effect of Visual Stimuli on the Perception of Emotion in Speech and Music', Conference for the Society for Music Perception and Cognition, Toronto, Canada (August 8–11, 2013).

D. Huron, K. Nisula, and _____, 'Confusing Sadness and Relaxed Musical Expressions: Animal Signaling versus Speech Prosody Interpretations', 3rd International Conference on Music Emotion, Jyväskylä, Finland (June 11–15, 2013).

_____ and K. Nisula, 'The Size of Emotion: The Role of Visual Stimuli on the Perception of Affect in the Human Voice', 3rd International Conference on Music Emotion, Jyväskylä, Finland (June 11–15, 2013).

_____ and E. Allen, 'Examining the Effect of Environment on Tempo Preference' Conference of the Midwestern Society of Ethnomusicology, University of Cincinnati (April 12–13th, 2013)

_____ and E. Allen, 'Using APIs to Determine the Effect of Environment on Listening Habits,' 2013 Joint Annual Meeting of the British Forum for Ethnomusicology and ICTM-Ireland, Queens University, Belfast (April 4–7th, 2013)

_____, A. Carter-Cohn, M. Stankova, 'Prosody in Music: From the Avant-Garde to Afro-Pop,' Society of Composers National Conference, February 13–16, 2013 [Roundtable Discussion]

_____ and Y. Broze, 'A Diachronic Analysis of Harmonic Schemata in Jazz,' International Conference of Music Perception and Cognition, Thessaloniki, Greece (July 23–28, 2012)

_____, 'Prosodic Stress, Interval Size and Phrase Position: A Cross-Cultural Contrast', Meeting of the Northeast Music Cognition Group, Yale University (April 28th, 2012)

_____, 'The Evolution of *In Medias Res* in Jazz Standards,' 23rd Annual Conference for Music Theory Midwest, University of Michigan (May 18–19, 2012)

_____ 'A Database of the Harmonic Progressions of Jazz Standards,' Graduate Collo-

quium, Bienen School of Music, Northwestern University (March 6th, 2012) [Invited]

_____, 'An Analysis of Attraction and Tension in Two Debussy Preludes' Arts and Technology Research Laboratory Lecture Series, University of Dublin, Trinity College, February, 2011

_____, 'Probability and Debussy's Preludes: The Nature of Expectancy in *Brnyeres*' VIII *Gesellschaft für Musiktheorie*, University of Music and Dramatic Arts, Graz, Austria. (October, 2008)

_____, 'Melodic Probability in Debussy's String Quartet: The Use of Hidden Markov Models in Music Analysis,' Cardiff University Music Analysis Conference, Cardiff, Wales. (September, 2008)

_____, 'Debussy's Monochromatic Landscape: Melodic Process and Fluctuations in Form in *Pour Les Huit Doigts*' Royal Musical Association Annual Conference, University of Aberdeen, Scotland. (July, 2008)

_____, 'Melodic Expectation and Static Temporality: An Investigation into the Implicative Consequences of Inert Structures in Music,' *Gesellschaft für Musik and Asthetik/Sixth European Music Analysis Conference*, University of Freiburg, Germany. (October, 2007)

_____, 'Deconstructive Elements in Debussy's Compositional Style, Fifth Annual Conference of the *Society for Musicology in Ireland*, Dublin Institute of Technology, Dublin, Ireland. (May, 2007)

_____, 'Structuralist Approaches to Debussy's Music' Fourth Annual Conference of the *Society for Musicology in Ireland*, University of Limerick, Ireland. (May, 2006)

_____, 'Debussy's *Préludes*: An Analytical Dilemma' *Royal Musical Association's* Research Students Conference, University of Leeds, UK. (January, 2006)

POSTER
PRESENTATIONS

K. Nisula and **D. Shanahan**, 'The Role of Sound-Size Symbolism in Tone Perception', Conference for the Society for Music Perception and Cognition, Toronto, Canada (August 8–11, 2013).

_____ and E. Allen, 'A Tale of Forty Cities: The Effect of Population Density on Preferred Tempo', Conference for the Society for Music Perception and Cognition, Toronto, Canada (August 8–11, 2013).

_____ and D.Huron, 'Interval Size and Phrase Position: A Cross-Cultural Comparison,' International Conference of Music Perception and Cognition, Thessaloniki, Greece (July 23-28, 2012) [Poster]

K. Horn and _____, 'The Effect of Singing on Textual Memory,' International Conference of Music Perception and Cognition, Thessaloniki, Greece (July 23-28, 2012) [Poster Session]

PRESENTATIONS
TO THE GENERAL
PUBLIC

D. Shanahan, K. Horn, J. Albrecht, B. Paul, & Y.Broze, 'Music Cognition and Emotion with the Ohio State University Cognitive and Systematic Musicology Laboratory' Columbus Science Pub (June 5th, 2012)

_____, Pre-concert talk for the National Symphony Orchestra's performance of Tchaikovsky's *5th Symphony*, National Concert Hall, Presented by Radio Teilifis Eireann (RTÉ) (April 9, 2010)

_____, Pre-concert talk for the National Symphony Orchestra's performance of Tchaikovsky's *Manfred Symphony*, National Concert Hall, Presented by Radio Teilifis Eireann (RTÉ). (February 19, 2010)

ADMINISTRATIVE ROLES

College and Departmental Administrative Duties

Technical Assistant and Tutor, Trinity College, Dublin

Provided tutorials and assistance to undergraduates in the new music technology lab. Taught software such as cSound, Pure Data, Logic Pro, and Sibelius. I installed and maintained this lab for two years.

Undergraduate Admissions Assistant, Trinity College, Dublin

Graded entrance exams and conduct interviews with prospective students.

Disability Services Tutor, Trinity College, Dublin

Music department's designated tutor for the Office of Disability Services; worked on a weekly basis with students with various learning disabilities.

Postgraduate Representative in Music, Trinity College, Dublin

Coordinated seminars within the department, and established a reading group for the postgraduate students.

Examination Supervision and Marking, Trinity College, Dublin

Sat on the department's Board of Examiners for four years. The board focused on the final marks of the students, and recommended supplemental examinations when needed.

AWARDS AND FUNDING

Research Enhancement Grant, Ohio State University, College of Arts and Sciences

This grant for \$3,000 was recently awarded for the planning of a Music Cognition Symposium at Ohio State in May, 2013. It was recently matched by both the School of Music and the Center for Cognitive Sciences, for a total of \$9,000.

Provost's Teaching Award, 2011, Trinity College, Dublin (Nominated)

Nominated for the university-wide teaching award for the 2010-2011 academic year.

Post-Graduate Studentship, Trinity College, Dublin (2008-2009)

This studentship enables "highly qualified candidates" to undertake postgraduate studies.

Recipient, Graduate Studies Arts Research Funding, 2008

This funding allowed me to travel to conferences in the United States.

Recipient, Taylor Bequest Funding, 2005-2010

Awarded funding for research costs and travel expenses while a postgraduate

PROFESSIONAL
AFFILIATIONS
AND SERVICE

Managing Editor of *Empirical Musicology Review*
(Beginning with Vol. 7, No. 3/4, August, 2013).

Chair, Midwestern Music Cognition Symposium [May 24-26, 2013]

I am the chair and organizer of this regional symposium, which will have keynote presentations from Professors Robert Gjerdingen, Glenn Schellenberg, and Elizabeth West Marvin.

Peer Reviews for *Music Perception*, *Music Analysis*, and *Psychomusicology*

Member, Society for Music Perception and Cognition

Member, Society for Ethnomusicology

Member, The Society for Music Theory

Member of the Committee for Sustainability (2010–Present)

Member, The College Music Society

TECHNOLOGY
EXPERIENCE

Experience with the following software and programming languages:

Assistant and Tutor in the Music Technology Lab which included the use of Logic, Sibelius, ProTools, cSound, PureData, MaxMSP, and Kontakt.

Extensive experience with R, Python, Ruby, and Bash (including Sed and AWK) programming languages

L^AT_EX(typesetting language)

Logic and Sibelius (experience teaching these programs)

Lilypond (code-based musical notation software)

Humdrum Toolkit (language for music information retrieval)

Praat Speech Analysis Software

Able to perform basic hardware and software repairs and upgrades on machines running Windows, Mac, and Linux operating systems.

PERFORMANCE
INTERESTS

Extracurricular Performance Activities:

Performances with jazz, rock, and pop groups in Dublin (2005-2011).

Performances at some of the countries largest venues including Vicar Street, Whelan's, The Roisin Dubh. Outdoor festivals included Electric Picnic (2006, 2008-2011), No Place Like Dome (2009-2011).

Active session musician in jazz and classical guitar and double bass.

Performance on jazz guitar and double bass in Ireland, the United Kingdom, The United States, and Italy.

Residencies held throughout Dublin with various jazz groups.

Private instrumental instructor to a number of students in the Dublin area on both jazz guitar and bass.

REFERENCES
AVAILABLE TO
CONTACT

Professor Richard Will

(email: rw6w@virginia.edu; phone: (434)924-3052)

- Associate Professor and Chair, McIntire Department of Music
- ◇ 112 Old Cabell Hall, PO Box 400176, University of Virginia, Charlottesville, VA 22904
- ★ *Professor Will has observed me in a teaching environment, and is the Chair of the Music Department at the University of Virginia.*

Professor David Huron

(email: huron.1@osu.edu; phone: +(614) 688-4753)

- Arts and Humanities Distinguished Professor of Music and Center for Cognitive Science
- ◇ 110 Weigel Hall, Ohio State University, Columbus, OH 43210
- ★ *Professor Huron and I are currently collaborating on a number of research projects, which will be submitted for publication in the coming months.*

Professor Simon J. Trezise

(e-mail: strezise@tcd.ie; phone: +353 (0)1 896 1120)

- Head of Department, University of Dublin, Trinity College
- ◇ House 5, Dept. of Music, Trinity College, Dublin, D2, Ireland.
- ★ *Dr. Trezise was my PhD supervisor*

Dr. Steven Rings

(e-mail: srings@uchicago.edu; phone: +1 (773) 702-8577)

- Assistant Professor of Music, University of Chicago
- ◇ University of Chicago, 1010 East 59th Street Chicago, Illinois 60637
- ★ *Dr. Rings was the external examiner for my doctoral dissertation, and has provided guidance on a number of issues regarding my research in both the phenomenology of music and the perception of Debussy's music.*

Professor Martin Adams

(e-mail: madams@tcd.ie; phone: +353 86-852 1402)

- Professor of Music, University of Dublin, Trinity College
- ◇ Dept. of Music, House 5, Trinity College Dublin, Dublin 2, Ireland.
- ★ *Professor Adams observed my teaching on a number of occasions at Trinity College, Dublin. He also served as internal examiner for my dissertation.*