

Pantelis N. Vassilakis, Ph.D.

Department Chairman, Associate Professor

Columbia College Chicago, School of Media Arts, Department of Audio Arts and Acoustics

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EDUCATION**Ph.D. Music Cognition, Acoustics & Aesthetics - University of California, Los Angeles, 2001**

Doctor of Philosophy in Ethnomusicology, specialization in Systematic Musicology
(Music Cognition and Acoustics; Musical Aesthetics)

M.A. Music Cognition, Acoustics & Aesthetics - University of California, Los Angeles, 1997

Master of Arts in Ethnomusicology, specialization in Systematic Musicology

B.A. Composition - Kingston University, Surrey, England, 1993

Bachelor of Arts in Music Composition and Music Technology

Electrical Engineering - National Polytechnic of Athens, Greece, 1982-86

Courses in Physics (Mechanics, Waves, Electricity & Magnetism) and Digital Systems of Communication

ACADEMIC EXPERIENCE**Department Chairman, Associate Professor, Department of Audio Arts and Acoustics, Columbia College Chicago, 2009-**

- Introduction to Psychoacoustics
- Aesthetics of the Motion Picture Sountrack
- Perception and Cognition of Sound

Adjunct Professor, Department of Audio Arts and Acoustics, Columbia College Chicago, 2007-2009**Adjunct Professor, School of Music, DePaul University, 2003-2009**

- Introduction to acoustical and cognitive aspects of music composition and performance
- Film music's role in meaning construction within the cinematic experience
(2007 Blackboard Greenhouse Award Finalist)
- Recent trends in music education research
(First online course at DePaul's School of Music)
- Introduction to qualitative and quantitative methods in music research

Post-Doctoral Fellow, Life Sciences, University of California, Los Angeles, 2002-03

Post doctoral certificate in Auditory Science - UCLA, Department of Physiological Science

Lecturer & Teaching Assistant Department of Ethnomusicology, University of California, Los Angeles, 1996-2000

- Teaching Ethnomusicology with Technology: Web design, digitization software, digital multimedia, and their application to ethnomusicological research
- Cognitive Psychology of Music (Advisor: R.A. Kendall)
- Musical Acoustics (Advisor: R.A. Kendall)
- Field & Lab Methods: Introduction to theories and methods related to fieldwork in ethnomusicology (Advisor: T. Rice).

Peer Reviewing

- Journal of the Acoustical Society of America
- Computer Music Journal
- Empirical Musicology Review
- Journal of Comparative Physiology A
- Arts Education Policy Review
- Oxford University Press
- Continuum
- Hawaii International Conference on the Arts and Humanities
- MERLOT (Multimedia Educational Resource for Learning and Online Teaching)
- Quality Matters ® (Online Course Design Rubric)

Academic/Professional Memberships

- Acoustical Society of America
- Society for Music Perception and Cognition
- Society for Ethnomusicology (Audiovisual Committee)
- College Music Society
- MERLOT (Music Editorial Team)
- Quality Matters (Certified Course Reviewer)

PROFESSIONAL/CREATIVE EXPERIENCE**DePaul University Libraries/IDD/School of Music, 2003-2009**

- Digitization/production, cataloguing, and dissemination of digital audio and video content for DePaul's Schools of Music and Education
- Instructional design for face-to-face, online, and hybrid courses
- Research, development, and implementation of technology tools for teaching music
- Acoustical design consultation for the School of Music new facilities

Digital Sound Restoration and Mastering, 1998-2003

- T. Rice's *The Music of Bulgaria: Experiencing Music, Expressing Culture*; Book CD (2003)
- C-T Seck's *West African Music Meets Jazz* - CD, Vol. 2 of UCLA Artist Series (2002)
- Apsara Media's *Sidi Sufis: African Indian Mystics of Gujarat* - CD (2002)
- Rounder Records' *Sacred Music of the Moroccan Jews* - CD (2000)
- Garland Encyclopedia's volume on *Europe*; Book CD (2000)
- H. Rees's *Echoes of History: Naxi Music in Modern China*; Book CD (2000)
- Portions of the reel-to-reel collections at UCLA's Ethnomusicology Archive (1998-2000)

BBC Radio 3 / London Greek Radio / London Greek Theater Company, England, 1994-95

Designer, engineer and producer of theater projects for radio programming and the stage

London Chinese Orchestra, London, England, 1993-94

Managed auditions, hiring, rehearsals, venue bookings, and promotion; composed, arranged, and conducted the original score for the Orchestra's 1994 London tour; project was funded by the 1993 London Arts Board Award for Original Cross-Cultural Contribution in the Arts and portions of the work were broadcast on *BBC TV Channel 2* (1/94)

English National Ballet, London, England, 1992

Musical director for the company's 1992 "Nutcracker Ball," celebrating the 100 years of Tchaikovsky's "Nutcracker;" managed auditions, hiring, rehearsals, and recordings, and coordinated dance rehearsals; composed, arranged, and produced original music awarded the Princess of Wales Honorary Award

Alligator Lounge & The Gig (Los Angeles); Purcell Room & HQ (London); Berlin & Mad (Athens, Greece), 1988-98

Sound engineer for live performances within a wide range of styles, ensemble sizes, and instrumentations

ADMINISTRATION & LEADERSHIP**Department Chairman, Department of Audio Arts and Acoustics, Columbia College Chicago, 2009-**

Mission and strategic plan re-drafting – Faculty development - Assessment and curriculum development – Marketing, budgeting, and fund-raising

VISION twenty12 Strategic Planning, DePaul University Libraries, 2006-07

Mission and strategic plan drafting for the DePaul Library, in conjunction with DePaul's VISION twenty12 strategic plan, including drafting, delegation, and implementation of action plans

Digital Copyright Policy Subcommittee, Co-chair, DePaul University, 2005-08

Led research, drafting, and implementation of the University-wide copyright policy for course-related dissemination of digital A/V resources, in collaboration with Indiana University, UCLA, the University of Virginia, and DePaul's legal office. Delivered DePaul's official copyright policy in summer 2008

Learning & Content Management Solutions Committee, Co-chair, DePaul University, 2007-08

Part of the Teaching, Learning & Technology University-wide committee, researching learning and content management solutions; participated in the Blackboard 8.0 upgrade (11/2008), including systems testing and faculty training coordination

Audience Response Systems Committee, Co-chair, DePaul University, 2007

Part of the Teaching, Learning & Technology University-wide committee, researching the educational benefits of Audience Response Systems (clickers) and conducting vendor comparison tests; coordinated vendor presentations and budget planning; final solution delivered in spring 2007

Blogging Solutions Committee, Co-chair, DePaul University, 2005-06

Part of the Teaching, Learning & Technology University-wide committee, researching blogging solutions as learning tools; coordinated vendor comparison tests and vendor presentations

Hiring Committees, DePaul University, 2005-Present

Co-chaired and/or participated in hiring committees on behalf of the Department of Instructional Design and Development and the Libraries; latest search: Associate Director of Libraries for Digital Collections

Grant Writing and Management, DePaul University, 2007-08

Coordinated, secured, and managed two grants for the Musicianship and Performance Departments at DePaul's School of Music.

Internet 2 Consortium and DePaul University, 2003-06

Coordinated high-profile Internet 2 teaching and performance events linking DePaul's School of Music to the Sociedad Artistica Tecnológico, Monterrey, the National Arts Center, Ottawa, and the Manhattan School of Music, NY

AWARDS & HONORS

Faculty/Staff Recognition Awards, 2006-2009

DePaul University, Chicago, IL - Teaching and Learning Resources

Peer Reviewer Extraordinaire, 2008

MERLOT International Conference '08, Minneapolis, MN

Blackboard Greenhouse Exemplary Course Award Finalist, 2007

National recognition of excellence in course design with over 100 online, hybrid, or web-enhanced Blackboard courses competing annually

Ph.D. Processional Marshal, 2002

University of California, Los Angeles, CA - Doctoral Hooding Ceremony

Best Student Paper Award in Musical Acoustics, 2001

142nd meeting of the Acoustical Society of America, Ft. Lauderdale, FL

Dissertation Year Fellowship, 2000-01

University of California, Los Angeles, CA - Graduate Division

Graduate Student Profile, Fall 2000

University of California, Los Angeles, CA - Graduate Quarterly

Annual Research Fellowship, 1999-2000 / Summer Research Fellowship, 1999

University of California, Los Angeles CA - Graduate Division

Gallery of Acoustics, First Prize, 1999

Acoustical Society of America - Interdisciplinary Technical Group on Signal Processing in Acoustics - 138th meeting of the Acoustical Society of America, Columbus, OH

Ethnomusicology Department Fellowship, 1995-96

University of California, Los Angeles, CA

National Training Award (N.T.A.), England, 1994

London winner of the *N.T.A. for Individual Achievement* - Award offered annually to recent college graduates, recognizing a significant achievement in business and the arts

London Arts Board Award (L.A.B.), England, 1993

L.A.B. Award for Original Cross-Cultural Contributions in the Arts, recognizing my work for the *London Chinese Orchestra*

English National Ballet & HRH Princess of Wales, Honorary Award, 1992

Special honor recognizing my work for the English National Ballet

RESEARCH INTERESTS

- **Cognition** (psychoacoustics, timbre, harmony, sound localization)
- **Acoustics** (musical acoustics, digital sound, spectral analysis, architectural acoustics)
- **Hearing** (cochlear mechanics, otoacoustic emissions)
- **Film Music** (theory, aesthetics, interrelationship of aural and visual stimuli)
- **Ethnomusicology** (theory and methods, cross-cultural aesthetics, music and ethnicity)
- **Aesthetics** (musical meaning and emotion, hermeneutics, experimental aesthetics)
- **Instructional Design** (assessment-driven collaborative learning)

PUBLICATIONS

[available at <http://www.acousticlab.org/vitae.htm>]

Vassilakis P.N. (in press). "Assessment-Driven Collaborative Learning," *Symposium*, Journal of the College Music Society, Stanley and Shaw, editors.

Vassilakis P.N. and Kendall, R.A. (2010). "Psychoacoustic and cognitive aspects of auditory roughness: definitions, models, and applications," *Proceedings of Human Vision and Electronic Imaging XV* 7527: 75270 O1-7. SPIE: Bellingham, Washington & IS&T: Springfield, Virginia.

Vassilakis, P.N. and Fitz, K. (2008). *SRA 2.0: A Web-based Research Tool for Spectral and Roughness Analysis of Sound Signals*. Supported by a Northwest Academic Computing Consortium grant to J. Middleton, Eastern Washington University.
[<http://musicalgorithms.ewu.edu/algorithms/roughness.html>]

Simmons, D.D., Meenderink, S.W.F., and Vassilakis, P.N. (2006). "Anatomy, physiology, and function of auditory end-organs in the frog inner ear," in *Hearing and Sound Communication in Amphibians*, P.M. Narins, A.S. Feng, R.R. Fay, and A.N. Popper, editors, pp. 184-220. Vol. 28 in the series, "*Springer Handbook of Auditory Research*," R.R. Fay, and A.N. Popper, editors. New York: Springer.

Alves, W. and Vassilakis, P.N. [online supplement only] (2006). "Active listening tools - Online supplement," in *Music of the Peoples of the World*. Belmont, CA: Wadsworth / Thomson Learning.
[http://music.wadsworth.com/alves_1e]

Vassilakis, P.N. (2005a). "Auditory roughness as means of musical expression," *Selected Reports in Ethnomusicology* 12: 119-144.

Vassilakis, P.N. (2005b). "Organizing and recognizing musical tension/release patterns may be culture dependent," *Acoustical Institute of Physics, Press Room*.
[<http://www.aip.org/149th/Vassilakis.html>]

Vassilakis, P.N., Meenderink, S.W.F, and Narins, P.M. (2004). "Distortion product otoacoustic emissions provide clues to hearing mechanisms in the frog ear," *J. Acoust. Soc. Am.* 116(6): 3713-3726.

Giorgoudes, P. and Vassilakis, P.N. (2004). *Cyprus Music Network: Online digital music archive of Cypriot folk music*. Nicosia: Intercollege. Project funded by the *Cyprus Research Promotion Foundation*. [<http://www.cmn.intercollege.ac.cy>]

Vassilakis, P.N. (2002). *Music of the Near East: Online teaching and research tool showcasing UCLA's Near East music ensemble*. Los Angeles, CA: University of California, Los Angeles. Images, video clips, sound examples, and text providing historical, ethnographic, musicological, and organological information. Project supported by the *Department of Ethnomusicology, University of California, Los Angeles*.
Portions licensed to: Alves, W. (2006) (see above)
[<http://acousticlab.org/world/Ensembles/NearEast/NearEast.htm>]

Vassilakis, P.N. (2001). *Perceptual and Physical Properties of Amplitude Fluctuation and their Musical Significance*. Doctoral Dissertation. Los Angeles, CA: University of California, Los Angeles.

Vassilakis, P.N. (1997). *Beats, the Difference tone, and the Perception of the Missing Fundamental*. Master's Thesis. Los Angeles, CA: University of California, Los Angeles.

INVITED LECTURES

Northwestern University, Electronic Engineering and Computer Science Department, McCormick School of Engineering and Applied Science, 2009

"Psychoacoustic and cognitive aspects of auditory roughness: definitions, models, and applications."

Stanford University, Center for Computer Research in Music and Acoustics (CCRMA), 2008

"Culture-dependent emotional reactions to music: Auditory roughness, cultural background, and musical tension-release judgments"

Acoustical Society of America, Los Angeles Chapter, 2002

"Three-dimensional sound signals and their relevance to wave energy quantities and sound interference products"

INVITED CONFERENCE PRESENTATIONS

Vassilakis, P.N. and Kendall, R.A. (2010). "Psychoacoustic and cognitive aspects of auditory roughness: definitions, models, and applications," *Human Vision and Electronic Imaging XV Conference*, IS&T/SPIE Electronic Imaging 2010, San Jose, CA.

Vassilakis, P.N. (2007a). "Interdisciplinary challenges and potential in film-music course design," *Proceedings of the 8th Conference of the Society for Music Perception and Cognition*: 63-64. C. Beckett and M. Hall, editors. Montreal, Canada: Concordia University. Symposium, *Music in multimedia: Theoretical, empirical, and pedagogical perspectives*

Vassilakis, P.N. (2007b). "Representing sound energy, phase, and interference using three-dimensional signals," *J. Acoust. Soc. Am.* 121(5/2): 3098. Special session, *Speech Communication: Frontiers of Spectrum Analysis with Speech Applications*

CONFERENCE PRESENTATIONS & PROCEEDINGS

Vassilakis, P.N. (2010). "Facilitating effective online learning: Teaching faculty how to teach online," Proceedings of the 8th Annual HICE (Hawai'i International Conference on Education). CD-ROM (ISSN #1541-5899), Honolulu, HI. [<http://www.hiceducation.org>]

Vassilakis, P.N. (2009). "Assessment-driven collaborative learning: Case study of two online music courses," *Proceedings of the 7th Annual HICAH* (Hawai'i International Conference on Arts and Humanities). CD-ROM (ISSN #1541-5899), Honolulu, HI. [<http://www.hichumanities.org>]

Vassilakis, P.N. and Kendall, R.A. (2008a). "Auditory roughness profiles and musical tension/release patterns in a Bosnian *ganga* song," *J. Acoust. Soc. Am.* 124(4/2): 2448.

Vassilakis, P.N. (2008b). "Acoustic differences in instrument construction and performance practices among musical traditions reveal and guide different aesthetic attitudes towards timbre" *Proceedings of the 53rd SEM* (Society for Ethnomusicology): 123. Wesleyan University, Middletown, CT.

- Vassilakis, P.N. and Kendall, R.A. (2008b).** "Two case studies of culture-dependent emotional reactions to music: Middle-Eastern *mijwiz* pieces and Bosnian *ganga* singing," *Proceedings of the 20th biennial meeting of IAEA* (International Association of Experimental Aesthetics): 124. Chicago, IL.
- Vassilakis, P.N. and Kendall, R.A. (2007).** "Acoustical, perceptual, and cognitive aspects of *ganga* singing: Culture dependent emotional reactions to a *ganga* song." Paper presented at the 52nd SEM Conference (Pre-conference Symposium on Cognitive Ethnomusicology). Columbus, OH.
- Kendall, R.A. and Vassilakis, P.N. (2007).** "Interactions of timbre with consonance, dissonance, and roughness in multitimbral triads," *Proceedings of the 8th Conference of the Society for Music Perception and Cognition*: 30-31. C. Beckett and M. Hall, editors. Montreal, Canada: Concordia University.
- Vassilakis, P.N. (2007c).** "Assessment- and multimedia-driven course design that aims at collaborative learning." Paper presented at the 50th National Conference of the College Music Society, Salt Lake City.
- Vassilakis, P.N. (2007d).** "SRA: A web-based research tool for spectral and roughness analysis of sound signals," *Proceedings of the 4th Sound and Music Computing (SMC) Conference*: 319-325. C. Spyridis, A. Georgaki, G. Kouroupetroglou, and C. Anagnostopoulou, editors. Lefkada, Greece: National Kapodistrian University of Athens.
- Vassilakis, P.N. (2007e).** "SRA: An online research tool for sound signal analysis." *Presented at the 7th MERLOT International Conference (MIC), 2007*, New Orleans, LA. [<http://conference.merlot.org/2007/> - Thu. 8/9/07, 5:30 p.m.]
- Vassilakis, P.N., Kendall, R.A., and Racy, A.J. (2006).** "The worlds of music: culture-dependent emotional reactions to an improvisation on the *mijwiz*," *Proceedings of the 51st SEM Conference*: 197. University of Hawai'i at Manoa.
- Kendall, R.A. and Vassilakis, P.N. (2006).** "Perceptual acoustics of consonance and dissonance in multitimbral triads," *J. Acoust. Soc. Am.* 120(5/2): 3276.
- Vassilakis, P.N. (2006a).** "Music as a means for modeling the human experience of time," *Proceedings of the 4th Annual HICAH* (Hawai'i International Conference on Arts and Humanities). CD-ROM (ISSN #1541-5899), Honolulu, HI. [<http://www.hichumanities.org>]
- Vassilakis, P.N. (2006b).** "SRA: An online tool for Spectral and Roughness Analysis of sound signals," *J. Acoust. Soc. Am.* 120(5/2): 3677.
- Vassilakis, P.N. and Fitz, K. (2006).** "SRA: An online tool for Spectral and Roughness Analysis of sound signals," *Proceedings of the 9th ICMPC*: 486. M. Baroni, A. R. Addessi, R. Caterina, and M. Costa, editors. Bologna: Bononia University Press.
- Vassilakis, P.N. and Kendall, R.A. (2006).** "Musical tension/release patterns and auditory roughness profiles in an improvisation on the Middle-Eastern *mijwiz*," *Proceedings of the 9th ICMPC*: 361. M. Baroni, A. R. Addessi, R. Caterina, and M. Costa, editors. Bologna: Bononia University Press.
- Vassilakis P.N. and Moore J. (2006).** "Using multimedia instructional materials and frequent assessments to achieve learning." Paper presented at the 4th Annual SLATE Conference (Supporting Learning and Technology in Education). Chicago, IL: University of Chicago.
- Vassilakis, P.N. (2005a).** "An improvisation on the Middle-Eastern *mijwiz*; auditory roughness profiles and tension/release patterns," *J. Acoust. Soc. Am.* 117(4/2): 2476.

- Vassilakis, P.N. (2005b).** "Art as a mode of knowing and a model for action," *Proceedings of the 3rd Annual HICAH*. CD-ROM (ISSN #1541-5899), Honolulu, HI. [<http://www.hichumanities.org>]
- Vassilakis, P.N. (2004a).** "Instructional design in online environments: Challenges and possibilities." Paper presented at the *2nd Annual SLATE Conference*. Chicago, IL: University of Chicago.
- Vassilakis, P.N. (2004b).** "Dichotic beats: Perception of sound interference versus detection of sound-source motion," *Proceedings of the 8th ICMPC*. R. Ashley and S. Lipscomb, editors (CD-ROM). Evanston, IL: Northwestern University.
- Vassilakis, P.N. (2004c).** "Towards a phenomenology of film music," *Proceedings of the 2nd Annual HICAH*. CD-ROM (ISSN #1541-5899), Honolulu, HI. [<http://www.hichumanities.org>]
- Vassilakis, P.N. (2003).** "Three-dimensional sound signals and their relevance to wave energy quantities and sound interference products," *J. Acoust. Soc. Am.* 114(4/2): 2350.
- Vassilakis, P.N. and Narins, P.M. (2003).** "Evoked otoacoustic emissions provide clues to hearing mechanisms in the frog," *J. Acoust. Soc. Am.* 114(4/2): 2414. [Also presented at the 33rd annual meeting of the *Society for Neuroscience*, New Orleans, LA.]
- Vassilakis, P.N. (2002).** "Dichotic sound interference products, sound localization cues, and wave interaction at a neural level," *J. Acoust. Soc. Am.* 112(5/2): 2299.
- Vassilakis, P.N. (2001).** "Auditory roughness estimation of complex spectra - roughness degrees and dissonance ratings of harmonic intervals revisited," *J. Acoust. Soc. Am.* 110(5/2): 2356.
- Vassilakis, P.N. (2000a).** "Amplitude modulation depth versus degree of amplitude fluctuation: implementation error, adjustment and implications," *J. Acoust. Soc. Am.* 108(5/2): 2597.
- Vassilakis, P.N. (2000b).** "Auditory roughness estimation of complex spectra," *Proceedings of the 6th ICMPC*. C. Woods, G. Luck, R. Brochard, F. Seddon, and J. A. Sloboda, editors (CD-ROM). Keele, England: Keele University.
- Vassilakis, P.N. (1999).** "Chords as spectra, harmony as timbre," *J. Acoust. Soc. Am.* 106(4/2): 2286 (supported by UCLA's Graduate Division).
- Vassilakis, P.N. (1998a).** "The first pitch-shift effect as a Doppler effect: a simple physical explanation to a complex perceptual phenomenon," *J. Acoust. Soc. Am.* 104(3/2): 1799.
- Vassilakis, P.N. (1998b).** "A single model explaining the first and second pitch-shift effects as alternative manifestations of a single phenomenon," *Proceedings of the 5th ICMPC, Music Mind and Science*: 107-114. Seoul, Korea: Seoul National University.
- Vassilakis, P.N. (1997).** "First and second pitch-shift effects as alternative manifestations of a single phenomenon: introduction," *J. Acoust. Soc. Am.* 102(5/2): 3186.

COMPUTER SKILLS

Digital Sound (SoundForge, HelixProducer, QuickTimePro, ProTools, SoundEdit)

Web Design (FrontPage, Dreamweaver, HTML, JAVA Script)

Digital Image & Video (Photoshop, Windows Movie Maker, Media 100, Premier)

Programming (Visual Basic)

Word Processing & Desktop Publishing (Office, PageMaker, FrameMaker)

Mathematics (Statistica, MATLAB)

LANGUAGES

Greek: Fluent - **German & French:** Intermediate - **Italian & Spanish:** Beginner