JAMSHED BHARUCHA
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Office of the Provost
Tufts University
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EDUCATION

Harvard University, Ph.D., Psychology, 1983
Yale University, M.A., Philosophy, 1979
Vassar College, B.A. Honors, Biopsychology, 1978
Trinity College of Music, London, Associate's Diploma in Violin Performance, 1973

ADMINISTRATIVE POSITIONS

Provost and Senior Vice President, Tufts University, 2002-present.

Chief academic officer of the University; oversee School of Arts & Sciences, Engineering, Medical School, Fletcher School, Cummings School of Veterinary Medicine, Friedman School of Nutrition, Dental School, University College of Citizenship & Public Service, cross-school centers and institutes, Research Administration, faculty recruiting, tenure & promotion, academic programs, student affairs, athletics, admissions; oversee ten Boards of Overseers, manage International Board of Overseers, oversee strategic planning, drive priorities for budgets and development; cultivation, stewardship and travel for development, alumni relations and admissions.

Selected Program/Initiatives Launched

Summer Scholars Program: for undergraduate research across the University and affiliated hospitals. Provides $3,500 stipend to students, $1,000 professional fund to faculty advisor.

Provost's Fellowships: for top Ph.D. applicants. Provides $5,000 beyond standard stipend for first two years

Graduate Competitiveness Initiative. stributes $1M/year to Deans to make Ph.D. stipends more competitive, increase diversity in graduate recruiting, and create incentives for faculty to raise graduate support through grants.

Cross-school Ph.D. program in Water: Systems, Science, Society. Involves all seven Schools.

Increased number of junior and senior faculty leaves in Arts, Sciences & Engineering
Strengthened tenure/promotions process
Renovated Chemistry building
Created new space for integrated Neuroscience Department in Medical School
Planned new music building for 2006 opening
Planning new 180,000 sq ft Integrated Laboratory Complex

Dean of the Faculty, Dartmouth College, 2001-2002.

Oversaw all Departments and Programs in Arts & Sciences, the undergraduate programs and graduate programs; oversaw faculty recruiting, tenure and promotion; curriculum development; fundraising, alumni relations.

Deputy Provost, Dartmouth College, 2000-2001.

Oversaw the Library, Computing Services, Grants & Contracts, Technology Transfer, Institute for Security Technology Studies, University Press of New England, cross-school initiatives; institution-wide planning, budget modeling.

Recruited new Director of the Institute for Security Technology Studies: a federally funded center on cyber-security research and development

Recruited new College Librarian

Co-led (with VP for Finance) development of financial planning model

Associate Dean of the Faculty for the Social Sciences, Dartmouth College, 1997-2000.

Oversaw Departments and Programs in the Social Science Division (Anthropology, Economics, Geography, History, Psychological & Brain Sciences, Sociology); Chaired Social Science Divisional Council (of Department Chairs); faculty recruiting, tenure and promotions; grievances; space planning.

Acquired MRI machine for Dept of Psychological & Brain Sciences (first MRI for an Arts & Sciences psychology department in the US)

Advanced the planning for Moore Hall, a new building for the Department of Psychological and Brain Sciences

Renovated Silsby Hall, main social sciences building; created new space for Anthropology

Chaired institutional self-study in Computing and the Information Environment: the report that contributed to the creation of a Center for Computational Science and a Center for Teaching and Learning.

FACULTY POSITIONS

Tufts University

Professor of Psychology, 2002-present.

Dartmouth College

John Wentworth Professor, 1997-2002.
Professor, Department of Psychological & Brain Sciences (orig. Psychology), 1995-2002.
Associate Professor, Department of Psychology, 1989-95.
Assistant Professor, Department of Psychology, 1983-89.
Faculty member in interdisciplinary Program in Linguistics & Cognitive Science, 1989-2002.
Faculty member in graduate program in Electro-Acoustic Music, 1989-2002.
Faculty member in Program in Cognitive Neuroscience, Dartmouth College, 1991-2002.

Other

Visiting Scholar, Department of Psychology, Stanford University, 1988.
Visiting Scholar, Department of Psychology, Carnegie-Mellon University, 1987.
Research Associate (pre-doctoral), Department of Psychology, Cornell University, 1982-83.

AWARDS

Distinguished Achievement Award, Alumnae and Alumni of Vassar College, 2005

Undergraduate Teaching Initiative Special Award (given by the Student Assembly), 2002
Fellow, Center for Advanced Study in the Behavioral Sciences, Stanford, CA, 1993-94.
Huntington Teaching Award, Dartmouth College, 1989.
Fellow, American Institute of Indian Studies, 1985.
Swinbourne Prize in Biology, Vassar College, 1978.
Phi Beta Kappa, 1978.

GRANTS

NIH, 1999-2004: PI on Section 4, “Brain Imaging and Auditory Cognition” ($376,825), in program project “Program in Cognitive Neuroscience” (PI: M.S. Gazzaniga) ($5,555,811), 2P50 NS17778-18.
National Science Foundation, 1996-2000: "Auditory Anchoring" ($205,610), SBR-9601287.
National Science Foundation, 1993-96: "Modeling and Studies of Auditory Cognition" ($188,782), DBS-9222358.
National Science Foundation, 1993-94: Grant toward Fellowship at Center for Advanced Study in the Behavioral Sciences, SES-9022192.
Senior Faculty Grant, Dartmouth College, 1993.
National Institute of Neurological Disorders and Stress, 1990-1993: Co-PI with M.Tramo on section "Cortical Networks in Auditory Pattern Perception" in program project "Program in Cognitive Neuroscience", NS17778.
National Science Foundation, 1989-92: "Modeling the Acquisition of Expectancies in Music" ($100,248), BNS-8910778.
McDonnell/Pew training grant in Cognitive Neuroscience, 1989-1992: Co-PI (with M.S. Gazzaniga).
Rockefeller Center grant, Dartmouth College, 1988-90: Co-PI with David E. Jones, "Mind and Music: A Cross-Cultural Simulation".
Keck Foundation Scientific Courseware Grant, 1988: "A Neural Net Learning Simulator".
Faculty Fellowship, Dartmouth College, 1987.
Keck Foundation Scientific Courseware Grant, 1985: Co-PI with John C. Baird, "MindLab, a Macintosh Laboratory for Perception & Cognition".

BOARDS

Board of Trustees, International Foundation for Music Research, 2000-present.
President’s Advisory Council, Vassar College, 2002-present.
Board of Governors, University Press of New England, 2000-2001.
Board of Trustees, Vassar College, 1991-1999:
Chair, Trustee Budget & Finance Committee, 1994-1999.
Served on following Trustee Committees: Executive, Academic Affairs, College Relations, Buildings and Grounds, Audit.
Advisory Panel, National Science Foundation (Program in Human Cognition & Perception), 1993-1997.
Board of Directors, Society for Music Perception and Cognition, 1992-1994.
Board of Directors, Alumnae and Alumni of Vassar College, 1991-1995.

EDITORIAL WORK AND RESEARCH COMMENTARY

Special Action Editor, *Psychological Review*, 2001.
Editor, *Music Perception*, 1994-1998 (Associate Editor, 1992-94; Consulting Editor, 1986-92).
Consulting Editor, *Journal of Experimental Psychology: Human Perception & Performance*, 1989-1994.
Manuscript reviewer for numerous journals and presses.
Featured on "Grey Matters: Music and the Brain", Public Radio International, March 1998.
Consulted on "MindTalk", TV show produced by New Hampshire Council on the Humanities.
Featured in "The Mystery of Music: How it Works in the Brain", *New York Times*, May 16, 1995.
Commentator on National Public Radio segments on music and the brain.
Featured in W.F. Allman (1990, June), The Musical Brain, *US News and World Report*, pp. 56-62.
Featured on PCTV (Giles Bateman, Host/Producer) demonstrating DartNet for a segment on neural nets. Broadcast in January, 1995.
Featured in Discover magazine issue on "Creativity".

SELECTED COMMITTEES

Tufts: Chair, Provost's Council; Co-Chair, Task Force on Research Integration with Tufts-New England Medical Center; Budget Committee, President's Academic Counci; First Staff, Trustee Academic Affairs Committee. *Dartmouth*: President's Executive Committee; President's Academic Council; Committee Advisory to the President; Budget Committee; Committee on Organization and Policy; Committee on Instruction; Committee on the Faculty; Council on Libraries; Council on Sponsored Activities; Council on Computing; Faculty Affirmative Action Review Committee; Committee on Economic Status of the Faculty; Chair, Self-Study Committee on Computing and the Information Environment; Chair, Search Committee for Treasurer/VP for Finance; Chair, Rockefeller Center Faculty Council; Chair, Social Science Divisional Council.

TEACHING & ADVISING

Tufts: Guest lectures in Departments of Child Development, Psychology, Music.
Dartmouth: Introductory Psychology (team taught); Cognition; Thought, Memory and Language; Experimental Study of Cognition; Experimental Design, Methodology & Data Analysis; Auditory Perception & Music Cognition; Modeling Cognition with Neural Nets. *Graduate*: Proseminar (team taught); Graduate Core Seminar in Perception and Cognition; Auditory Perception and Music Cognition; Measurement and Statistics II. *Guest lectures in*: "Physics of Music" (Physics Department); "Music & Technology" (Music Department); "Reason & Argument" (Philosophy Department); "Chance" (Mathematics Department); "Artificial Intelligence" (Computer Science Department) and "Educational Psychology" (Education Department). *Advising:* Pre-major advising; Major advising in Department of Psychological and Brain Sciences, Program in Cognitive Science; Graduate advising in Department of Psychological and Brain Sciences, Graduate Program in Electro-Acoustic Music, Graduate Program in Cognitive Neuroscience.
Harvard: Tutor (Department of Psychology)

PUBLICATIONS

Bharucha, J.J., Curtis, M. & Paroo K. (under review). Varieties of musical experience. *Cognition.*

Tillmann, B., Bharucha, J.J. & Bigand, E. (2003). Learning and perceiving musical structures: further insights from artificial neural networks. In R. Zatorre & I. Peretz (Eds.) *The Cognitive Neuroscience of Music*. Oxford University Press.

Tillmann, B., Janata, P., & Bharucha, J.J. (2003). Activation of the inferior frontal cortex in musical priming. *Cognitive Brain Research, 16,* 145-161.

Janata, P., Birk, J., Van Horn, J. D., Leman, M. Tillmann, B. & Bharucha, J. J. (2003) The cortical topography of tonal structures underlying Western music. *Science, 298,* 2167-2170.

Janata, P., Birk, J.L., Tillmann, B., & Bharucha, J.J. (2003). Online detection of tonal pop-out in modulating contexts. *Music Perception, 20,* 283-306.

Tillmann, B., Janata, P., Birk, J., & Bharucha, J.J. (2003). The costs and benefits of tonal centers for chord processing. *Journal of Experimental Psychology: Human Perception and Performance.29*: 470-482.

Janata, P., Tillmann, B., & Bharucha, J. J. (2002). Listening to polyphonic music recruits domain-general attention and working memory circuits. *Cognitive, Affective, and Behavioral Neuroscience, 2,* 121-140.

Tillmann, B. & Bharucha, J.J. (2002). Effect of harmonic relatedness on detection of temporal asynchronies. *Perception & Psychophysics, 64,* 640-649.

Justus, T.C. & Bharucha, J.J. (2002). Music perception and cognition. In H. Pashler & S. Yantis (Eds.), *Stevens Handbook of Experimental Psychology (3rd Ed.).* New York: Wiley.

Justus, T.C. & Bharucha, J.J. (2001). Modularity in musical processing: The automaticity of harmonic priming. *Journal of Experimental Psychology: Human Perception and Performance, 27, 1000-1011.*

Tillmann, B., Bharucha, J.J., & Bigand, E. (2001). Implicit learning of regularities in Western tonal music by self-organization (pp. 175-184). In R.M. French & J.P. Sougne (Eds), *Connectionist Models of Learning, Development and Evolution.* Heidelberg: Springer.

Tillmann, B, Bharucha, J.J. & Bigand, E. (2000). Implicit learning of tonality: A self-organizing approach. *Psychological Review, 107,* 885–913.

Tillmann, B. & Bharucha, J.J. (1999). Perceiving and Learning Harmonic Structure: Some News from MUSACT. *International Journal of Computing Anticipatory Systems, 4,* 289-300.

Bharucha, J.J. (1998). Neural nets, temporal composites and tonality. In D. Deutsch (Ed.), *The Psychology of Music* (2d Ed.). New York: Academic Press.

Tekman, H.G. & Bharucha, J.J. (1998). Implicit knowledge versus psychoacoustic similarity in priming of chords. *Journal of Experimental Psychology: Human Perception & Performance, 24,* 252-260.

Bharucha, J.J. (1996). Melodic anchoring. *Music Perception, 13,* 383-400.

Bharucha, J.J. & Mencl, W.E. (1996). Two issues in auditory cognition: Self-organization of categories and pitch-invariant pattern recognition. *Psychological Science, 7,* 142-149.

Bharucha, J.J. (1995). Neural nets and musical cognition. In R. Steinberg (Ed.), *Music and the Mind Machine* (pp. 99-104). Berlin/New York: Springer.

Bharucha, J.J. (1995). Editorial. *Music Perception, 3,* 271-272.

Bharucha, J.J. (1993). Tonality and expectation. In R. Aiello (Ed.), *Musical Perceptions* (pp. 213-239). Oxford: Oxford University Press. (Translated into Japanese).

Tekman, H.G. & Bharucha, J.J. (1992). Time course of chord priming. *Perception & Psychophysics, 51,* 33-39.

Bharucha, J.J. (1992). Tonality and learnability. In M.R. Jones & S. Holleran (Eds.), *Cognitive bases of musical communication* (pp. 213-223). Washington, DC: American Psychological Association.

Tramo, M.J., & Bharucha, J.J. (1991). Musical priming by the right hemisphere post-callosotomy. *Neuropsychologia, 29*, 313-325.

Bharucha, J.J. (1991). Cognitive and brain mechanisms in perceptual learning. In J. Sundberg, L. Nord & R. Carlson (Eds.), *Music, Language, Speech and Brain* (pp. 349-358). London: Macmillan.

Bharucha, J.J. (1991). Pitch, harmony and neural nets: A psychological approach. In P. Todd & G. Loy (Eds.), *Music and Connectionism* (pp. 84-99). Cambridge: M.I.T. Press.

Bharucha, J.J., & Todd, P. (1991). Modeling the perception of tonal structure with neural nets. *Computer Music Journal, 13*, 44-53. Reprinted in P. Todd & G. Loy (Eds.), *Music and Connectionism* (pp. 128-137). Cambridge: M.I.T. Press.

Tramo, M.J., Bharucha, J.J., & Musiek, F.E. (1990). Music perception and cognition following bilateral lesions of auditory cortex. *Journal of Cognitive Neuroscience, 2*, 195-212.

Bharucha, J.J., & Olney, K.L. (1989). Tonal cognition and artificial intelligence: Priming studies and connectionist modelling. *Contemporary Music Review, 4*, 341-356. Reprinted in McAdams & Deliege (Eds.), *Music and the Cognitive Sciences*. New York: Harwood. Translated and published in French as *La Musique et les Sciences Cognitives*. Brussels: Pierre Mardaga Editions.

Hubbard, T. L., & Bharucha, J.J. (1988). Judged displacement in apparent vertical and horizontal motion. *Perception & Psychophysics, 44*, 211-221.

Bharucha, J.J. (1987). Music cognition and perceptual facilitation: A connectionist framework. *Music Perception, 5*, 1-30.

Bharucha, J.J., & Stoeckig, K. (1987). Priming of chords: Spreading activation or overlapping frequency spectra? *Perception & Psychophysics, 41*, 519-524.

Bharucha, J.J. (1987). MUSACT: A connectionist model of musical harmony. In *Proceedings of Ninth Annual Conference of the Cognitive Science Society* (pp.508-517). Hillsdale, NJ: Lawrence Erlbaum.

Bharucha, J.J., Meike, B., & Baird, J.C. (1987). The Macintosh as a user-friendly laboratory for perception and cognition. *Behavior Research Methods, Instruments, & Computers, 19*, 131-134.

Bharucha, J.J., & Stoeckig, K. (1986). Reaction time and musical expectancy: Priming of chords. *Journal of Experimental Psychology: Human Perception and Performance, 12*, 403-410.

Bharucha, J.J., & Pryor, J. (1986). Disrupting the isochrony underlying rhythm: An asymmetry in discrimination. *Perception & Psychophysics, 40*, 137-141.

Bharucha, J.J. (1986). Review of *Cognitive processes in the perception of art* by W.R. Crozier & A.J. Chapman. *Music Perception, 3*, 315-322.

Krumhansl, C., & Bharucha, J. (1986). 1) Absolute pitch. 2) Psychology of music. 3) Tests of musical capacity and ability. In D.M. Randel (Ed.), *Harvard Dictionary of Music* (Rev. ed.). Cambridge: Harvard University Press.

Bharucha, J.J., Olney, K.L., & Schnurr, P.P. (1985). Detection of coherence-disrupting and coherence-conferring alterations in text. *Memory & Cognition, 13*, 573-578.

Bharucha, J.J. (1985). Kognitive Musikpsychologie. In H. Bruhn, R. Oerter, & H. Rosing (Eds. and trans.), *Musikpsychologie: Ein Handbuch in Schlusselbegriffen* (pp. 123-132). Munich: Urban & Schwarzenberg.

Bharucha, J.J. (1984). Anchoring effects in music: The resolution of dissonance. *Cognitive Psychology, 16*, 485-518.

Bharucha, J.J. (1984). Event hierarchies, tonal hierarchies, and assimilation: A reply to Deutsch and Dowling. *Journal of Experimental Psychology: General, 113,* 421-425.

Castellano, M.A., Bharucha, J.J., & Krumhansl, C.L. (1984). Tonal hierarchies in the music of North India. *Journal of Experimental Psychology: General, 113,* 394-412.

Bharucha, J.J., & Krumhansl, C.L. (1983). The representation of harmonic structure in music: Hierarchies of stability as a function of context. *Cognition, 13,* 63-102.

Krumhansl, C.L., Bharucha, J., & Castellano, M.A. (1982). Key distance effects on perceived harmonic structure in music. *Perception & Psychophysics, 32,* 96-108.

Krumhansl, C.L., Bharucha, J.J., & Kessler, E.J. (1982). Perceived harmonic structure of chords in three related musical keys. *Journal of Experimental Psychology: Human Perception and Performance, 8,* 24-36.

Rahman, Y.E., Hanson, W.R., Bharucha, J.J., Ainsworth, E.J., & Jaroslow, B.N. (1978). Mechanisms of reduction of antitumor drug toxicity by liposome encapsulation. *Annals of the New York Academy of Sciences, 308,* 325-342.

CONFERENCE PRESENTATIONS

Curtis, M.E. & Bharucha, J.J. (2005, May). *Culture-specific tonal knowledge drives judgments about an unfamiliar tonality: A probe-tone study.* Poster presented at The Neurosciences and Music II Conference, Leipzig, Germany.

Curtis, M.E., Paroo, K.I., Bharucha, J.J. & Holcomb, P.J. (2005, April). *Music influences the processing of syntax.* Poster presented at the Cognitive Neuroscience Society.

Curtis, M.E. & J. Bharucha (2004, July). *Expecting the unexpected: Cross-modal priming of low-probability stimuli.* Poster presented at the 112th Annual Convention of the American Psychological Association, Honolulu, Hawaii.

Curtis, M.E. & Bharucha, J.J. (2003, June). *Tonal violations interact with lexical processing: Evidence from cross-modal priming.* Paper presented at the Annual Meeting of the Society for Music Perception and Cognition, Las Vegas.

Bharucha, J.J., Tillmann, B. & Janata, P. (2001, August). *Culture and the Brain.* Paper presented at the Society for Music Perception and Cognition.

Bharucha, J.J., Tillmann, B. & Janata, P. (2001, March). Poster presented at the annual meeting of the Cognitive Neuroscience Society, New York.

Janata, P, Tillmann, B. & Bharucha, J.J. (2000, Nov). *Neural circuits for auditory selective attention in complex natural scenes*. Poster presented at the 30th annual meeting of the Society for Neuroscience, New Orleans, LA.

Tillmann, B., Bharucha, J. J. & Bigand, E. (2000, September). *Implicit Learning of Regularities in Western Tonal Music by Self-Organization*. Paper presented at the Sixth Neural Computation and Psychology Workshop NCPW6: Evolution, Learning, and Development. Liège, Belgium..

Pittenger, R.A. & J.J. Bharucha (2000, August). *Preference and Similarity Judgments of Mistuned Unstable Tones*. Poster presented at the 6th International Conference on Music Perception and Cognition. Keele, UK.

Tillmann, B., & Bharucha, J. J. (2000, August). *Effect of harmonic relatedness on the detection of temporal asynchronies*. Paper presented at the 6th International Conference on Music Perception and Cognition. Keele, UK.

Bharucha, J.J., Tillmann, B. & Janata, P. (2000, May). *Cultural adaptation of the brain to music and speech: An fMRI study of listening to Indian and Western music, Hindi and English*. Paper presented at the New York Academy of Science.

Justus, T.C. & Bharucha, J.J. (1999, August). *The effects of schematic and veridical expectation on chord processing.* Paper presented at the annual meeting of the Society for Music Perception and Cognition, Evanston, IL.

Pittenger, R.A. & Bharucha, J.J. (1999, August). *Anchoring: Auditory attention and the resolution of nonchord tones*. Paper presented at the annual meeting of the Society for Music Perception and Cognition, Evanston, IL.

Justus, T.C., Bharucha, J.J., Maczko, K.A., & Wessinger, C.M. (1999, April). *Differential lateralization of auditory processing as a function of musical training.* Poster presented at the annual meeting of the Cognitive Neuroscience Society, Washington, DC.

Pittenger, R.A. & Bharucha, J.J. (1999, April). *Anchoring: The Resolution of Dissonance.* Paper presented at the annual meeting of the Eastern Psychological Association, Providence, RI.

Justus, T.C., Peterson, D.V., & Bharucha, J.J. (1999, April). *Implicit versus veridical knowledge of tonality*. Poster presented at the annual meeting of the Eastern Psychological Association, Providence, RI.

Bharucha, J.J., A.J. Saykin, D.V. Peterson, T.C. Justus, L.A. Gibson, D. Cooke, C.H. Moritz & C.M. Wessinger. (1998, November). *Processing of tonal versus random musical sequences examined with fMRI.* Poster presented at the 28th Annual Meeting of the Society for Neuroscience, Los Angeles.

Bharucha, J. (1997, September). *Converging Explorations in the Cognitive Neuroscience of Music*. Paper presented at the International Computer Music Conference: Thessolonica, Greece.

Peterson, D.V. & Bharucha, J.J. (1997, April). *Detection of mistuned partials in octave-spaced tones and phi-tones.* Paper presented at the Eastern Psychological Association, Boston.

Bharucha, J.J. (1996, August). *Acquisition of implicit knowledge and topographic representations through neural self-organization.* Paper presented at the XXVI International Congress of Psychology, Montreal.

Peterson, D.V. & Bharucha, J.J. (1996, August). *Phi-Tones: An inharmonic world.* Paper presented at the International Conference on Music Perception and Cognition, Montreal.

Bharucha, J.J. (1996, May). *Tonotopic representations in neural net models.* Paper presented at ICON VI, Monterey.

Bharucha, J.J. (1995, June). *Melodic anchoring in Mozart's K282.* Paper presented at the Society for Music Perception and Cognition, Berkeley.

Bharucha, J.J. & Mencl, W.E. (1994, November). *Self-organization of auditory spectra: The illusory perception of pitch*. Paper presented at the meeting of the Psychonomic Society, St. Louis.

Bharucha, J.J. (1994, July). *Mental tonal structures.* Paper presented at the Third International Conference on Music Perception and Cognition, Liege, Belgium.

Bharucha, J.J. (1994, July). *Learning auditory patterns through neural self-organization*. Paper presented at the Third International Conference on Music Perception and Cognition, Liege, Belgium.

Bharucha, J.J., Tramo, M.J. & Zatorre, R.J. (1993, November). *Abstraction of the missing fundamental following bilateral lesions of auditory cortex*. Paper presented at the annual meeting of the Society for Neuroscience, Washington, DC.

Bharucha, J.J., McNellis, M. & Mitra, S. (1992, December). *Neural Net Modeling of the Perceptual Learning of Raga Structure* . Paper presented at the International Workshop on Recent Trends in Speech, Music and Allied Signal Processing, Varanasi, India.

Bharucha, J.J. (1992, July). *Neural Networks and Perceptual Organization of Music.* Paper presented at the meeting of the Cognitive Science Society, Bloomington, Indiana.

Bharucha, J.J. (1992, February). *The Emergence of Auditory and Musical Cognition from Neural Nets Exposed to Environmental Constraints.* Paper presented at the Second International Conference on Music Perception & Cognition, Los Angeles.

Tekman, H.G. Bharucha, J.J. & Mitra, S. (1992, February). *Chord Priming Effects in Intonation Judgments with Different Levels of Mistuning.* Paper presented at the Second International Conference on Music Perception & Cognition, Los Angeles.

Tramo, M. & Bharucha, J.J. (1992, February). *Brain Mechanisms in Harmony Perception.* Paper presented at the Second International Conference on Music Perception & Cognition, Los Angeles.

Tramo, M.J. & Bharucha, J.J. (1991, August). *Cortical Networks in Associative Auditory Processing*. Paper presented at the Third IBRO World Congress of Neuroscience, Montreal.

Tramo, M.J. & Bharucha, J.J. (1991, August). *Cerebral lateralization in auditory pattern perception: Insights from split-brain reseasrch.* Paper presented at the 2d Dartmouth International Conference on Epilepsy and the Corpus Collosum, Hanover.

Tekman, H., & Bharucha, J.J. (1991, April). *Dynamics of the development of harmonic priming: From tones to keys and back.* Paper presented at the annual meeting of the Eastern Psychological Association, New York.

Bharucha, J.J., & Gleason, T. (1990, November). *Speech accompanied by a tone with aligned or misaligned stress*. Paper presented at the annual meeting of the Psychonomic Society, New Orleans.

Hubbard, T.L., & Bharucha, J.J. (1990, November). *Is judged displacement a modular process*? Poster presented at the annual meeting of the Psychonomic Society, New Orleans.

Bharucha, J.J. (1990, September) *Computational, Neural, and Psychological Constraints on a Cognitive Theory of Musical Perception.* Paper presented at the Second International Conference on Music and the Cognitive Sciences, Cambridge, England.

Bharucha, J.J. (1990, May). *Supervised and Unsupervised Neural Net Learning Algorithms for Modeling Music Perception*. Paper presented at the meeting of the Acoustical Society of America, University Park, PA.

Tekman, H., & Bharucha, J.J. (1990, March). *Time course of the build-up of harmonic priming effects*. Paper presented at the meeting of the Eastern Psychological Association, Philadelphia.

Bharucha, J.J. & Stoeckig, K. (1989, November). *Chord priming: The automaticity of schematic expectancies*. Paper presented at the annual meeting of the Psychonomic Society, Atlanta.

Bharucha, J.J. (1989, November). Panelist in *Music Cognition* symposium, Society for Ethnomusicology, Cambridge, Mass.

Bharucha, J.J. (1989, October). *Neural nets and perceptual learning of tonal expectancies*. Paper presented at the First International Conference on Music Perception and Cognition, Kyoto, Japan.

Bharucha, J.J., & Todd, P. (1988, November). *Connectionist learning of schematic musical expectancies*. Paper presented at the annual meeting of the Psychonomic Society, Chicago.

Bharucha, J.J. (1988, November). *Modeling the acquisition of cross-cultural differences in tonality with neural nets*. Paper presented at the meeting of the Acoustical Society of America, Honolulu.

Bharucha, J.J. (1988, August). *Neural net modeling of music.* American Association for Artificial Intelligence, Minneapolis/St. Paul. (Paper published by the American Association for

Artificial Intelligence in *Proceedings of the First Workshop on Artificial Intelligence and Music, AAAI-88*).

Bharucha, J.J. (1988, August). *Learning and modularity of musical structure: A neural net perspective*. Paper presented at the annual meeting of the Cognitive Science Society, Montreal.

Bharucha, J.J. (1988, August). *MindLab: Use as a support system for course projects in cognition and perception*. Paper presented at the annual convention of the American Psychological Association, Atlanta.

Bharucha, J.J. (1987, November). *A connectionist model of musical harmony: Evidence from priming*. Paper presented at the annual meeting of the Psychonomic Society, Seattle.

Bharucha, J.J. (1987, July). *MUSACT: A connectionist model of musical harmony*. Paper presented at the annual meeting of the Cognitive Science Society, Seattle.

Bharucha, J.J., & Stoeckig, K. (1987, April). *Musical priming: Spreading activation or overlap of harmonics*? Paper presented at the annual meeting of the Eastern Psychological Association, Arlington, VA.

Stoeckig, K., & Bharucha, J.J. (1987, April). *Harmonic priming and the changing of musical expectation*. Paper presented at the annual meeting of the Eastern Psychological Association, Arlington, VA.

Bharucha, J.J., & Stoeckig, K. (1986, December). *Reaction time and musical expectancy: Priming of chords with no partials in common.* Paper presented at the meeting of the Acoustical Society of America, Annaheim.

Bharucha, J.J., Meike, B., & Baird, J.C. (1986, November). *The Macintosh as a user-friendly laboratory for perception and cognition*. Paper presented at the annual meeting of the Society for Computers in Psychology, New Orleans.

Bharucha, J.J., & Stoeckig, K. (1986, April). *The measurement of musical expectation: Harmonic priming.* Paper presented at the annual meeting of the Eastern Psychological Association, New York.

Bharucha, J.J. (1985, August). *Assimilation and expectation in tonal harmony.* Paper presented at the Workshop on Physical and Neuropsychological Foundations of Music, Ossiach, Austria.

Bharucha, J.J., Olney, K.L., & Schnurr, P.P. (1985, March). *Coherence in text and music: Asymmetries in recognition memory.* Paper presented at the annual meeting of the Eastern Psychological Association, Boston.

Bharucha, J.J. (1983, November). *Anchoring effects in melody perception.* Paper presented at the annual meeting of the Psychonomic Society, San Diego.

Krumhansl, C.L., Bharucha, J.J., & Castellano, M.A. (1983, November). *Tonal hierarchies in the music of North India.* Paper presented at the annual meeting of the Psychonomic Society, San Diego.

Bharucha, J.J., & Krumhansl, C.L. (1982, August). *Representation of harmonic structure in music.* Poster presented at the annual convention of the American Psychological Association, Washington, DC.

INVITED LECTURES

Hebb Lecture Series, "The Cognitive Nature of Music", McGill University, 2005.

St. Botolph's Club, "The Brain on Music", Boston, 2005.

Vassar College, "The Brain on Music", Poughkeepsie, NY, 2005.

"The Brain on Music". Lectures for Tufts alumni. Philadelphia, New York, New Haven, San Fransisco, Los Angeles, Boston, New Hampshire, Miami, Palm Beach, Atlanta, Chicago, 2003-04.
Hampshire College, 2003
Tufts University, Department of Neuroscience, 2002
Harvard University, Humanities Center, 2001.
Minary Conference on Cognitive Neuroscience and the Arts, 2001.
McGill University, 2001
Inaugural lecture for John Wentworth Professorship, Dartmouth, 2000
Reed College, Departments of Psychology and Music, 2000
Symposium on the Neuroscience of Music, Niigata, Japan, 1999
Universite Rene Descartes, Department of Psychology, Paris, 1999
Universite de Bourgogne, Psychology Colloquium, 1998
Columbia University, Department of Music Colloquium, 1998
Dartmouth Club of Boston, 1998
National Academy of Science, 1997
McDonnell-Pew Summer Institute in Cognitive Neuroscience, Dartmouth, 1990, 1991, 1992, 1996, 1997
Dartmouth Horizons program for alumni, 1997, 1998, 1999, 2000, 2001
Dartmouth Medical School, Department of Audiology, 1994, 1996
Dean's Council, Dartmouth College, April, 1995
University of California, Berkeley, Department of Psychology, 1994
Center for Advanced Study in the Behavioral Sciences, Stanford, 1994
Vassar College, Psychology Colloquium, 1994
Stanford/Berkeley Symposium in Music Cognition, Stanford Department of Music, 1994
Stanford University, Center for Computer Research in Music and Acoustics (CCRMA), 1994
Stanford University, Department of Psychology, 1993
UCLA, Cognitive Science, 1993
Harvard Medical School, Eaton-Peabody Laboratory, 1993
Queens University (Canada), Department of Psychology, 1993
E.E. Just Symposium, Dartmouth College, 1993
University of Pennsylvania, Psychology Colloquium, 1992
Johns Hopkins University, Psychology Colloquium, 1992
Siemens Institute (Congress on the Psychophysiology and Psychopathology of Music), Munich, Germany, 1992
M.I.T. Media Lab, 1991
University of Washington, School of Music, 1991
Bates College, Psychology Colloquium, 1991
International Wenner-Gren Symposium on Music, Language, Speech and Brain, Stockholm, Sweden, 1990
Herbert von Karajan Symposium on Musical Intelligence, Vienna, Austria, 1990
Ohio State University (APA symposium on Cognitive Bases of Musical Communication), 1990
Columbia University, Psychology Colloquium, 1989
Queens University (Canada), 1989
Ohio State University, Psychology Colloquium, 1989
Evergreen State College, Colloquium, 1989
M.I.T., Media Lab, 1988
University of Pennsylvania, Sloan Cognitive Science lecture series, 1988

Brown University, Department of Cognitive and Linguistic Sciences, 1988
Stanford University, Center for Computer Research in Music and Acoustics (CCRMA), 1988
Institut de Recherche et de Coordination Acoustique/Musique (IRCAM), Paris, 1988
Tata Institute of Fundamental Research, Bombay, 1986
University of Texas at Dallas, 1984
Vassar College, Cognitive Science colloquium, 1984

SOFTWARE DEVELOPED AND DISTRIBUTED

MindLab (Macintosh program for picture-oriented experiments in psychology; Developed with Blake Meike, John C. Baird and the Dartmouth Courseware Development Group; Sold by Intellimation Library for the Macintosh.)
DartNet (Backpropagation neural net simulator for the Macintosh; Developed with Sean Nolan '94).